



# **OPERATION MANUAL**

## **PART A**

### **GENERAL**

Rev. No.: 08

March 2022

**PT. Smart Cakrawala Aviation**

**SCA/OPS/1-001**



# KEMENTERIAN PERHUBUNGAN DIREKTORAT JENDERAL PERHUBUNGAN UDARA

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Jakarta, 6 April 2022

Our Ref : AU-010 / 13 / 4 / DKPPU - 2022

To : Mr. Pongky Majaya  
PT Smart Cakrawala Aviation  
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Subject : REVIEW FOR THE APPROVAL OF OPERATION MANUAL PART A -  
GENERAL REV. 08 DATED 6 APRIL 2022

Dear Mr. Pongky Majaya,

I refer to the submission of the above mentioned document for review and approval on 31 March 2022.

The Document submitted has been reviewed and found in compliance with the Civil Aviation Safety Regulation part 135 and **Approved**.

Sincerely Yours,



Capt. Anderson Adri P.  
On Behalf of Director of DAAO  
Act. Deputy Director of Aircraft Operation

cc: Director of DAAO



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## CONTROL PAGE

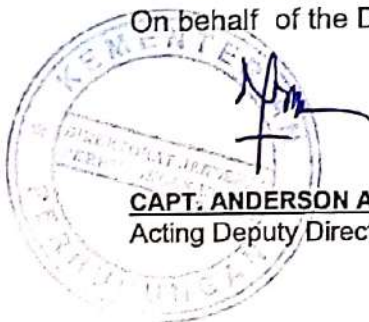
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This Operation Manual (OM) Part A – General has been reviewed and found meet all applicable requirements set forth in the Aviation Act No. 1 Year 2009 and Civil Aviation Safety Regulations (CASR). This Operation Manual Part A is approved for use by PT Smart Cakrawala Aviation with the understanding that Director General of Civil Aviation (DGCA) may require further revisions to this Manual as regulatory requirements or airworthiness standard are amended.

Any change to these manuals shall be reported to the Director General of Civil Aviation (DGCA) for Approval.

Jakarta, 6 April 2022

On behalf of the Director of Airworthiness and Aircraft Operations



**CAPT. ANDERSON ADRI P.**  
Acting Deputy Director of Aircraft Operations

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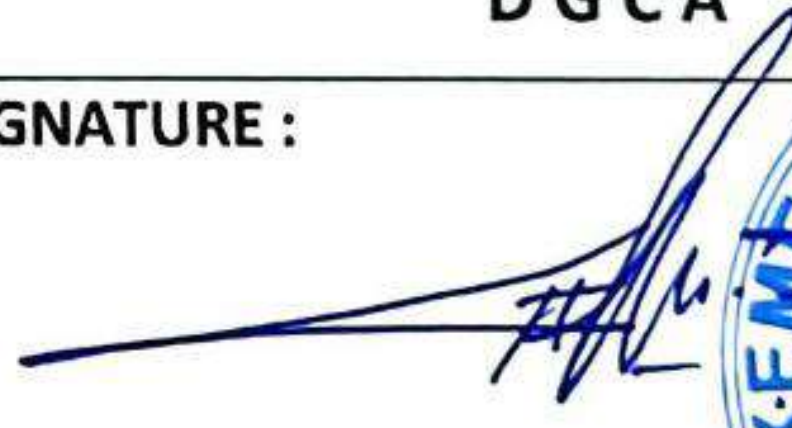
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SIGNATURE : 	SIGNATURE : 
DATE : 31 March 2022	DATE : 31 March 2022
NAME : CAPT. JAHRON BURHANI	NAME : CAPT. ALFIN BASTIAN FIRDAUS
TITLE : OPERATION MANAGER	TITLE : PRINCIPAL OPERATION INSPECTOR





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## APPENDIX A FORM



## MANUAL DISTRIBUTION LIST

<b>ASSIGNMENT (Title of Organization)</b>	<b>REMARK</b>
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## RECORD OF REVISIONS

Revision Number	Pages Affected	SUBJECT	Effective Date	Inserted Date	Signature
01	2-2	2.2.1 PT. Smart Cakrawala Aviation Organization Chart	08 MAR 19		
01	2-3	2.3.1 Management Personnel And Contact Number	08 MAR 19		
01	4-2	4.1.3 Procedure to Avoid Mixing Inexperienced Flight Crew	08 MAR 19		
01	4-4	4.3 SECOND IN COMMAND HANDLING THE AIRCRAFT	08 MAR 19		
01	5-4	5.2.3.1 Pilot-In-Command (PIC) or Captain Pilot requirement	08 MAR 19		
01	5-7	Second-In-Command (SIC) or First Officer	08 MAR 19		
01	8-39	8.25. Flights over Uninhabited Terrain	08 MAR 19		
01	10-12	10.7 PROCEDURES FOR FAMILIARIZATION AREAS, ROUTES AND AERODROMES	08 MAR 19		
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02	1-18	1.13.10 Rotorcraft Flight Manual (RFM)	12 Jun 2019		
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02	2-1	2.1.3 Types of Aircraft Operated	12 Jun 2019		
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02	9-2	9.1.5 Rotors Running Refueling	12 Jun 2019		

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02	10-32	10.18.2.1 Seat Occupation	12 Jun 2019		
03	1-4	1.4 COMPANY PROFILE	March 2020		
03	2-1	2.1.3 Types of Aircraft Operated	March 2020		
03	2-4	2.4.1 President Director	March 2020		
03	1-18	1.13.8 Safety Management System Manual(SMSM)	March 2020		
03	2-2	2.2.1 PT. Smart Cakrawala Aviation Organization Chart	March 2020		
03	2-3	2.3.1 Management Personnel and Contact Number	March 2020		
03	Appendix A-9	Load Sheet Cargo Version	March 2020		
03	Appendix A-11	Load Sheet Passenger Version	March 2020		
03	Appendix A-20	Load Sheet Aerial Survey Version	March 2020		
03	Appendix A-24	Weight & Balance EC-130	March 2020		
04		2.1.3 Types of Aircraft Operated	August 2020		
04	2-2	2.2.1 PT. Smart Cakrawala Aviation Organization Chart	August 2020		
04	2-2	2.3.1 Management Personnel and Contact Number	August 2020		
04	2-4	2.4.1 President Director	August 2020		
04	4-1	4.1.1. Minimum Flight Crew	August 2020		
05	2-2	2.2 ORGANIZATION CHART	Sept 2020		
05	2-2	2.2.1 PT. Smart Cakrawala Aviation Organization Chart	Sept 2020		
05	2-3	2.3.1 Management Personnel and Contact Number	Sept 2020		
05	2-7	2.4.5 Chief External Load	Sept 2020		
05	8-40	8.26 EXTERNAL LOAD OPERATIONS (CASR 133)	Sept 2020		
05	Appendix A-2	Appendix SCA-OPS-002B OPERATIONAL FLIGHT PLAN HELICOPTER	Sept 2020		
03	5-5	5.2.3.1 Pilot-In-Command (PIC) or Captain Pilot Requirement	Apr 2021		

Revision Number	Pages Affected	SUBJECT	Effective Date	Inserted Date	Signature
05	2-1	2.1.3 Types of Aircraft Operated	Apr 2021		
05	4-1	4.1.1 Minimum Flight Crew	Apr 2021		
01	8-4	8.4.2 Airstrip /Airport Grouping and Airport Categorization	Apr 2021		
02	10-1	10.Flight procedures and flight navigation equipment	Apr 2021		
07	2-2	2.2 Organization Chart	Nov 2021		
07	2-3	2.3.1 Management Personnel and Contact Number	Nov 2021		
07	1-7	1.6.3 Publication of Manual	Dec 2021		
07	3-8	3.3.1 Operation Control Center	Dec 2021		
07	3-8	3.3.1 General	Dec 2021		
07	3-8	3.3.2 Flight Following, Flight Watch Location and Facilities.	Dec 2021		
07	2-1	2.1.2 Company Registered Name and Address	Dec 2021		
07	2-1	2.1.3 Types of Aircraft Operated	Dec 2021		
07	3-29	3.14 Emergency Response Plan	Dec 2021		
07	2-2	2.2 Organization Chart	Dec 2021		
07	2-14	2.4.11 Flight Operation Officer	Dec 2021		
07	1-7	1.6.2 Publication of Manual	Dec 2021		
07	3-18	3.5.8. Continuing Flight in Unsafe Conditions	Dec 2021		
07	6-3	6.2.2. Flight Crew – Flight Time and Duty Time PT. Smart Cakrawala Aviation	Dec 2021		
01	2-6	2.4.4. Chief Pilot fixed Wing and Rotary Wing	Mar 2022		
01	2-11	2.4.9. Chief Operations Control Center (OCC)	Mar 2022		



### REVISIONS HIGHLIGHT

Revision Number	Revision Date	Chapter	Page	Description of Changed
02	12 Jul 2019	1.4 COMPANY PROFILE	1-4	Change from aeroplane to aircraft
02	12 Jul 2019	1.5COMPANY COMMITMENT	1-5	Change Presiden director from Mr. Dedi Pasaribu to Mr. Pongky Majaya
02	12 Jul 2019	1.13.10 Rotorcraft Flight Manual (RFM)	1-18	Added company manual RFM (Rotorcraft Flight Manual)
02	12 Jul 2019	1.14 DEFINITIONS AND ABBREVIATIONS	1-19 Until 1-24	Added new definition and abbreviation related to Helicopter operations
02	12 Jul 2019	2.1.3 Types of Aircraft Operated	2-1	Added type aircraft operated
02	12 Jul 2019	2.2ORGANIZATION CHART	2-2	Added chief pilot rotary wing
02	12 Jul 2019	2.3.1 Management Personnel And Contact Number	2-3	Added chief pilot rotary wing
02	12 Jul 2019	2.4.4 Chief Pilot fixed Wing and Rotary Wing	2-5	Added duty, responsibility and qualification chief Pilot Rotary Wing
02	12 Jul 2019	2.4.10 Helicopter Landing Officer (HLO)	2-12	Added duty, responsibility and qualification Helicopter Landing Officer
02	12 Jul 2019	2.4.11 Flight Operation Officer(FOO)	2-12	Added duty, responsibility and qualification Helicopter Landing Officer
02	12 Jul 2019	2.5 APPOINTMENT OF ACTING PERSONNEL	2-13	Added Chief Pilot Fixed wing and Chief Pilot Rotary wing
02	12 Jul 2019	4.1.1 Minimum Flight Crew (CASR Section 135.383)	4-1	Added minimum flight crew for Robinson R66 and Airbus H130T2
02	12 Jul 2019	4.1.2 Designation of Pilot-In-Command	4-1	Added experience for Helicopter Pilot
02	12 Jul 2019	5.2.3.1 Pilot-In-Command (PIC) or Captain Pilot	5-4	Added requirement for Helicopter PIC
02	12 Jul 2019	5.4 HELICOPTER LANDING OFFICER (HLO)	5-9	Added requirement for HLO
02	12 Jul 2019	5.5 FLIGHT OPERATION OFFICER (FOO)	5-10	Added requirement for FOO

02	12 Jul 2019	6.2.2 Flight Crew – Flight Time and Duty Time PT. Smart Cakrawala Aviation	6-3	Added Flight time And duty time for Helicopter
02	12 Jul 2019	8.9.3 Minimum Fuel Requirement for Helicopter	8-15	Added Minimum fuel Requirement for Helicopter
02	12 Jul 2019	8.24.2 Helicopter Overwater Operation	8-39	Added Helicopter overwater Operation
02	12 Jul 2019	9.1.5 Rotors Running Refueling	9-1	Added Hot Refueling
02	12 Jul 2019	10.18.2.1 Seat Occupation	10-32	Added seat occupation for Helicopter
02	12 Jul 2019	Appendix A		
03	12 Mar 20	1.4 Company Profile	1-4	Added Casr 133
03	12 Mar 20	2.1.3 Types of Aircraft Operated	2-1	Added EC 130 T2
03	12 Mar 20	2.4.1 President Director	2-4	Added Duties, Responsibilities and Qualification for President Director
03	12 Mar 20	1.13.8 Safety Management System Manual (SMSM)	1-18	Change from SMM to SMSM
03	12 Mar 20	2.2.1 PT. Smart Cakrawala Aviation Organization Chart	2-2	Revision Chief Inspector and Chief Rotary wing and Chief OCC
03	12 Mar 20	2.3.1 Management Personnel And Contact Number	2-3	Revision Chief Pilot rotary and chief Inspector
03	12 Mar 20	Load Sheet Cargo Version	Appendix A-9	Revision 01
03	12 Mar 20	Load Sheet Passanger Version	Appendix A-11	Revision 01
03	12 Mar 20	Load Sheet Aerial Survey Version	Appendix A-20	Revision 01
03	12 Mar 20	Weight & Balance EC-130	Appendix A-24	Added new Fleet
04	August 2020	2.1.3 Types of Aircraft Operated	2-1	Types of Aircraft Operated
04	August 2020	2.2.1 PT. Smart Cakrawala Aviation Organization Chart	2-2	PT. Smart Cakrawala Aviation Organization Chart
04	August 2020	2.3.1 Management Personnel And Contact Number	2-3	Added new personnel Chief Rot wing
04	August 2020	2.4.1 President Director	2-4	Replace President Director
04	August 2020	4.1.1. Minumum Flight Crew	4-1	Added Minimum Flight Crew

05	Sept 2020	2.2 ORGANIZATION CHART	2-2	Added Chief Rotary wing and external Load
05	Sept 2020	2.2.1 PT. Smart Cakrawala Aviation Organization Chart	2-2	Added Chief Rotary wing and external Load
05	Sept 2020	2.3.1 Management Personnel and Contact Number	2-3	Chief Rotary wing and external Load
05	Sept 2020	2.4.5 Chief External Load	2-7, 2-8	Add to Duties, Responsibilities and Qualification (Casr 135.47)for Chief External Load
05	Sept 2020	8.26 EXTERNAL LOAD OPERATIONS (CASR 133)	8-40	Added External Load Operation
05	Sept 2020	Appendix A-2B Operational Flight Plan Helicopter	SCA-OPS-002B	Added Operational Flight Plan Helicopter
05	Sept 2020	Appendix A-25 External Load Check Form	SCA-OPS-021	Added External Load Check Form
05	Sept 2020	Appendix A-26 Load Sheet EC130T2 Cargo Version	SCA-OPS-022	Added Load Sheet EC130T2 Cargo Version
05	Sept 2020	Appendix A-27 Load Sheet EC130T2 Passenger Version	SCA-OPS-023	Added Load Sheet EC130T2 Passenger Version
03	April 2021	5.2.3.1 Pilot-In-Command (PIC) or Captain Pilot Requirement	5-5	Changed Pilot-In-Command (PIC) Captain Pilot Requirement
05	April 2021	2.1.3 Types of Aircraft Operated	2-1	Added Pilatus PC-6 B2/H4
05	April 2021	4.1.1 Minimum Flight Crew	4-1	Added Pilatus PC-6 B2/H4
01	April 2021	8.4.2 Airstrip /Airport Grouping and Airport Categorization	8-4	Added Pilatus PC-6 B2/H4
02	April 2021	10.Flight procedures and flight navigation equipment	10-1	Added Pilatus PC-6 B2/H4
05	Nov 2021	2.2. ORGANIZATION CHART	2-2	Change Chief Pilot Fixed Wing& Chief Pilot Rotary Wing
05	Nov 2021	2.3.1 Management Personnel and Contact Number	2-3	Change Chief Pilot Fixed Wing& Chief Pilot Rotary Wing
01	Dec 2021	1.6.2 Publication of Manual	1-6	Change from Operation Manager to Chief OCC.
01	Dec 2021	3.3.1 Operation Control Center	3-8	Change from Qualified Operation Staff to Flight Following Personnel at Each Base.

07	Dec 2021	3.3.1 General	3-8	Change from Qualified Operation Staff to Flight Following Personnel at Each Base.
07	Dec 2021	3.3.2 Flight Following, Flight Watch Location and Facilities	3-8	Change company address.
07	Dec 2021	2.1.2 Company Registered Name and Address	2-1	Change company address.
07	Dec 2021	2.1.3 Types of Aircraft Operated	2-1	Delete Robinson R66
07	Dec 2021	3.14 Emergency Response Plan	3-29	Add Emergency Response Plan
07	Dec 2021	2.2 Organization Chart	2-2	Revise Organization Chart
07	Dec 2021	2.4.11 Flight Operation Officer	2-14	Add responsibility as Base Supervisor while on duty / in charge (13.)
07	Dec 2021	1.6.3 Publication of Manual	1-7	Change review & revise Manual period, changed to "if necessary"
07	Dec 2021	3.5.8 Continuing Flight in Unsafe Conditions	3-18	Add Operation Manager responsibility of Declaration & Action on Emergency Situation.
07	Dec 2021	6.2.2. Flight Crew – Flight Time and Duty Time PT. Smart Cakrawala Aviation	6-3	Change Total Duty Days
01	Mar 2022	2.4.4. Chief Pilot fixed Wing and Rotary Wing	2-6	Revise Responsibilities Chief Pilot
01	Mar 2022	2.4.9. Chief Operations Control Center (OCC)	2-11	Revise Responsibilities Chief Operations Control Center

## **1. GENERAL**

### **1.1. INTRODUCTION**

The Operations Manual is issued in accordance with current Civil Aviation Safety Regulations (CASR). It complies with the terms and conditions of the Air Operator's Certificate, Operations Specification, and Authorization Condition Limitation (ACL) are subject to acceptance by DGCA, the National Aviation Authority responsible for issuing that AOC.

PT Smart Cakrawala Aviation operations personnel shall be familiar, guidance and comply with the contents of the Operations Manual. All PT Smart Cakrawala Aviation flight operations shall be conducted in strict compliance with all parts of the Operations Manual and current regulations of competent Authorities.

Whenever there is a difference between PT Smart Cakrawala Aviation policy or procedure and the regulations of competent authorities, the more conservative and safest operational procedure shall govern.

However, nothing in this manual or other manuals shall be so constructed as to prevent the PIC, in an emergency situation, from deviating from rules, operational procedures and methods in the interest of the safety of the aircraft and its occupants.



## **1.2. AUTHORITY FOR ISSUE**

PT. Smart Cakrawala Aviation Operations Manual is issued on the authority of the Operation Manager divided into 4 (four) parts A, B, C, D include with its sub manual, the nominated post holder for all department. The above post holder will be responsible for ensuring that the information contained in this manual is amended or revised so that the instructions and information contained therein are keep up to date and any such revisions or amendments are communicated to relevant staff.

**1.3. CONTENTS TO PARTS OF OPERATIONS MANUAL**

PT. Smart Cakrawala Aviation operations personnel shall be familiar, guidance and comply with the contents of the Operations Manual. All PT. Smart Cakrawala Aviation flight operations shall be conducted in strict compliance with all parts of the Operations Manual and current regulations of competent Authorities.

The Operations Manual (OM) is presented in four (4) volumes:

OPERATIONS MANUAL	
<b>PART A</b>	<b>General</b>
<b>PART B</b>	<b>Aircraft Operating Manual, Procedures and Requirements</b>
<b>PART C</b>	<b>Route and Airport Instructions and Information</b>
<b>PART D</b>	<b>Training and Checking Procedures</b>

**1.3.1. OM PART A - GENERAL**

The OM Part A contains the non-type related operational policies, procedures, instructions and guidance required for a safe flight operation. It details the duties and responsibilities of all operations personnel and their interrelationship with the operation as a whole.

**1.3.2. OM PART B - AIRCRAFT OPERATING INFORMATION**

The OM Part B contains all Aircraft type related instructions and procedures required for safety operation of the relevant Aircraft type. It takes account of any difference between types, variants or individual Aircrafts used by the company. It comprises the manufacturer's Aircraft documentation (POH), including relevant checklists, a description and instructions for the use of emergency equipment and carried on each Aircraft.

**1.3.3. OM PART C - ROUTE AND AIRPORT INSTRUCTIONS AND INFORMATION**

The OM Part C, or the Route Manual contains specific instructions and information pertaining to navigation, communication and aerodromes within PT. Smart Cakrawala Aviation approved area of operation.

**1.3.4. OM PART D – OPERATIONS TRAINING**

The OM Part D or the Operations Training contains all the training policies, instructions and qualifications required to qualify pilots and Dispatcher for the safe operation of PT. Smart Cakrawala Aviation Aircrafts.



### 1.4. COMPANY PROFILE

PT. Smart Cakrawala Aviation is authorized to conduct air transportation and aerial work for Aircraft Operation within or outside Indonesia under current CASR Part 135 which have an approved maximum seating capacity of 30 seats or less, excluding required crewmember seats to carriage of passengers and cargo, in non-scheduled Operation within Indonesia territory. This Manual has been prepared as guidance of Operation personnel of PT. Smart Cakrawala Aviation in the execution of their duties. It contains policies and procedures applicable to all flight Operation conducted under current CASR Part 135 and CASR 133. All duties shall be conducted in accordance with the procedures and minimum times contained in this manual and in accordance with Civil Aviation Safety Regulations (CASR).

This manual explains the internal organization system in detail, including the continuity of flight operation responsibility. It gives samples of flight operation forms used and their method of execution. The manual gives a detailed explanation of the following portions of the flight operation system.

The instructions, policies and procedures contained in this manual are in accordance with the laws and regulations of Indonesia. They are intended to summarize and display those provisions of the regulations applicable to PT. Smart Cakrawala Aviation, Operation and equipment, not replace existing regulations. In the event of conflict, the CASR take precedence.

Any reference made in this manual to the company, and/ or the Air Operator, shall be taken to mean PT. Smart Cakrawala Aviation.

Any question or comments pertaining to the use of this manual or the information contained herein should be directed to the Operation Manager, or the appropriate division of Operation at headquarters in PT. Smart Cakrawala Aviation.

## 1.5. COMPANY COMMITMENT

This Operation Manual documents is the Operation System of Operation Department of PT. Smart Cakrawala Aviation. It describes the structures and sequences on which organization of the Operation System is based and the means for implementing the Operation Policy and Operation Objectives stipulated by the PT. Smart Cakrawala Aviation. The company management and all personnel are committed to the implementation of this Operation Manual. This requirement includes the Indonesian Airworthiness Regulations in the Civil Aviation Safety Regulations (CASR) that must be complied in running the Operations aspect of Civil Aviation Business.

It outlines the structural and procedural organization and resources to achieve the Operation objectives and implement the Operation policy laid down by the Production Director of PT. Smart Cakrawala Aviation. The objective is for services provided to comply with the regulation and requirements relating to the business purpose and meet customer expectation. This Operation Manual is to help guide staff within business and to contribute to the safe and efficient performance of their task.

Operation Manager is responsible for ensuring that his/her staff have an adequate knowledge of the requirement of Operation Manual and other regulation applicable to his/her department.

This manual and related reference material will be maintained in the office of the Operation Department where it will be made available to appropriate company personnel and DGCA.

Jakarta, December 2021

**PT. SMART CAKRAWALA AVIATION**

Pongky Majaya  
Presiden Director

## **1.6. EDITING, PUBLICATION AND AMENDMENT RESPONSIBILITIES.**

### **1.6.1. Editing Manual**

#### Annotation of Change

Amendments will be in the form of replacement pages. They will be accompanied by: Filing Instructions (for print copies), an updated List of Effective Pages (LEP), and a brief outline of the purpose and the nature of the changes. A solid vertical black bar will indicate all changes to text and diagrams, (change- right bar) or in the margin closes to the page edge. Amended electronic copies shall be made available to all recipients.

#### Destruction and Disposal of Obsolete Operational Documents

On receipt of new documents either in hard copy, electronic or multimedia format, the previous version of the document shall be removed, destroyed and disposed off in an appropriate manner.

To maintain a “current” status of all the documents, any updated will distributed regularly updated through Company Mail issued with Flight Documents updated.

### **1.6.2. Publication of Manual**

#### Publication Authority

Chief OCC shall be responsible for the publication of the amendments to the Operations Manual. And it will be distributing by an electronic copy, then paper copy of the amendment will be distributing respectively (see of distribution list).

#### Management and Control of Flight Operations Documents / Publications

Documents and Publications relating to Flight Operations are controlled and managed by Operation Manager. All publications / documents sourced from a vendor shall be Library. All publications / documents sourced from a vendor shall be documented and a record of subscription / purchase shall be a period of two years. The validity of subscription shall be monitored.

On receipt of updates / revision to the publications, records of such updates / revision shall be maintained. OCC shall be responsible for the documentation, control and updates. All obsolete documents in all forms shall be suitably destroyed and disposed of as per the airline operations practices and procedures in force.

Operation Manager shall ensure that all documents / publications:

- Are reviewed and approved for adequacy prior to issue.
- Are updated, reviewed and approved for re-issue as necessary.
- The current revision status is displayed.
- Are available at point of use.
- Are eligible, readily identify able and retrievable
- Documents of external origin are identified and their distribution suitably managed.

That all obsolete are withdrawn to prevent unintended use by removing them from circulation and destroying / disposing per the procedure in force. Should any document be retained for any purpose with the Flight Operations, they shall be suitably identified and annotated as such, are stored in suitable electronic media in a designated computer.

A distribution list for all operational documents to manage its dissemination shall be maintained. All operational documents shall be duly signed by the issuing authority and these signed copies shall be deemed as original copy and shall be maintained at Library. Dissemination shall essentially be via electronic means like email to establish that the individual user has received the correct document.

All documents shall be published in PDF format for electronic dissemination. A record of receipt of all documents sent by Library to individual users shall be maintained for a period of 6 (six) months.

Each user, shall, further undertake that they have received, read relevant documentation update shall be reflected in the Company Mail issued every Monday (if applicable) and available with the Flight Plan shall be handed over to the Flight Crew. All Flight Crew while signing the Flight Release and understood all the operational information disseminated as detailed in the Company Mail.

### Documents

The following publications are considered “ORIGINAL” documents:

- Any document prepared by Flight Operations and issued by Operation Manager with signature in ink is deemed an original document.
- Document NOT generated by Operation Manager but received from manufacturers of aircraft and associated vendors.
- All original documents shall be kept with Library. Library shall maintain controlled copies of documents / publications marked “Controlled Copy” in red. An updated list of ‘Controlled Copy’ issued shall be available with the Library.

A designated person shall crosscheck availability of all the issued ‘Controlled Copy’ at the intended location on a bi-annual basis and corrective action shall be taken in case of discrepancy as per company policy / procedure in force.

Controlled Copies are NOT photo copied. Controlled Copies of relevant documents shall be maintained in main libraries and onboard the aircraft. Library shall be responsible to update the controlled copies in case of revision / changes to the original. All copies when printed by individual user shall be deemed to be uncontrolled copies and need to be updated by the user as required.

*Uncontrolled copies shall be marked as **UNCONTROLLED COPY** in red stamp.*

The set of documents available at the main Library are detailed and updated regularly.

## **1.6.3. Amending the Manual**

### General

*Assurance activities or periodic review* – A manual that fails to take account of changing circumstances is no longer relevant and loses credibility. All amendments to contents are to be subject to an DGCA approval changes to the Operations Manual may be required as a result of changes in the course of business, new operational requirements, quality and vetting process. Hand written amendments are NOT permitted, except in situations requiring immediate amendment in the interests of safety

### Responsibility

Each copy of the Operations Manual remains the property of PT. Smart Cakrawala Aviation, who assumes the overall responsibility for updating the contents of the manual. However, each holder of the Operations Manual is personally responsible for the security, the condition and the amendment status of their copy. And for controlling and monitoring to keep current and update Operations Manual is responsibility Operation Manager.

### Internal Responsibility for Initiating Amendments

Responsibility for the content of the various parts of this manual is vested as follows:

- Operation Manager shall be responsible for contents related to Flight Operations and Safety.
- Chief Pilot / Deputy shall be responsible for the contents related to Training and Standards.
- All holders of the Operations Manual are responsible to notify their superior without delay, in case they notice any error or discrepancy in the manual.

### Revision Cycle

The Operations Manual shall be review and revise if necessary.

### Conflict

In case of a conflict of the dates in the application of a new procedure, then the new procedure shall be used.

In case there is a conflict between the contents of a paper copy and an electronic copy, then the electronic copy shall be deemed correct.

### Approval

The contents of the Operations Manual have been approved in their entirety both internally and by the DGCA prior to initial issue. Further, the contents of all amendments or revisions to the Operations Manual must be acceptable to, or, where applicable, approved by, the DGCA.

## **1.6.4. Amendments Requiring DGCA Approval**

Operations Manager responsible for notifying DGCA of proposed changes and working with the DGCA on changes requiring approval.



When the amendment concerns any part of the Operations Manual which must be approved, this approval shall be obtained before the publication of the amendment. Exceptionally, if the amendment has an implication on safety, it may be published and applied immediately provided that the approval required has been applied.

## **1.7. DISTRIBUTION CONFIRMATION OF RECEIPT**

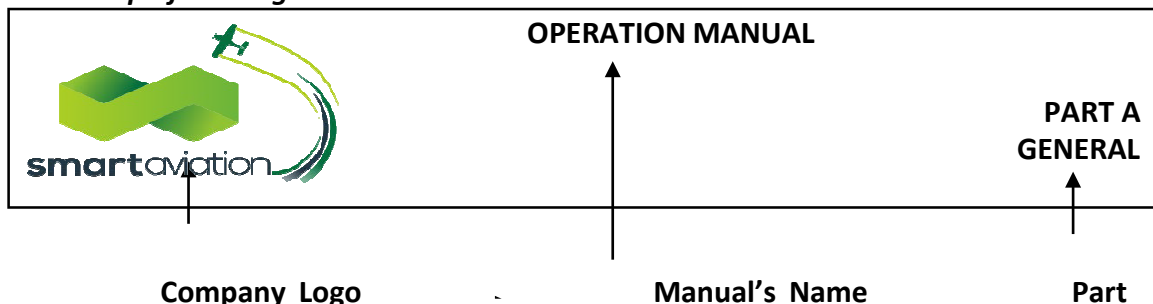
All Operations Manual copies will be electronically distributed by Operation Manager in format soft copies, save hard copies for offices (A4 format) and the aircraft library (A5 format), for ease of in-flight use, and shall have a ring binder that permits easy use and amendment under flight standard responsibility, but for individuals or users have the option of obtaining a softcopy or printing a hard copy at their own expense and responsibility for accuracy and update.

## 1.8. NOMENCLATURE

Chapter and Section Numbering

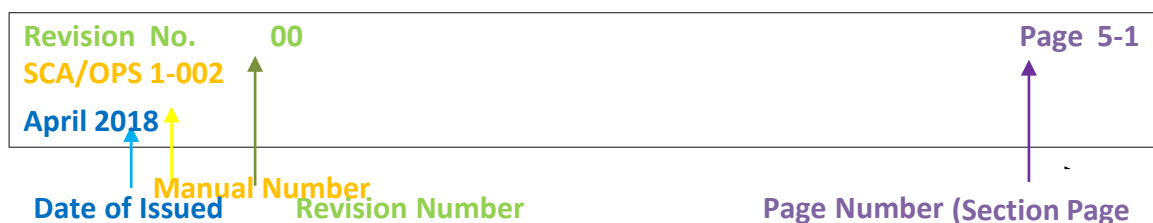
This Manual is subdivided into Chapters, Sections and Subsections.

### 1. Top of the Page



Identifier

### 2. Bottom of the Page



1)

A “decimal” nomenclature is used, as follows:

- Chapter        - First Numerical Identifier;
- Section        - Second Numerical Identifier;
- Sub-section   - Third Numerical Identifier, and as necessary a bracketed letter identifier.

Example: 1.5.1.is:

- Chapter 1                                : International Standard.
- Section 5                                : Amending the manual.
- Sub-section 1                           : General.

## **1.9. MANUAL CONTROL NUMBER**

This Operations Manual is pertains to the Regulations & Quality System application in the flight operations activities will be identified and control by Operation Manager as document number SCA/OPS-1-001. Shown below is a brief description of the manual control number

SCA : Stands for the Company Names of PT. Smart Cakrawala Aviation.

OPS : Stands for the department issued manual.

1 : Stands for level manual procedure to be observed and implemented within company, its need approval from DGCA.

01 : Stands for Manual Serial Number for Operations Manual approved by DGCA



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## **1.10. SYSTEM OF AMENDMENT AND REVISION**

Operation Manager is responsible for the overall control of this manual and will authorize both the content and issuance of amendments and revisions.

Revisions will be numbered in sequence and will contain the date of issue. All revisions will be recorded in Section 1.6 by the post holder for all departments. However, it is the responsibility of each manual holder to ensure all relevant staff is made aware of any material change to this manual.

## **1.11. DGCA INSPECTION AUTHORITY (135.37)**

PT. Smart Cakrawala Aviation and each person employed by PT. Smart Cakrawala Aviation will allow the DGCA to inspect inspection system, records, and procedures to determine compliance with CASR at any reasonable time to determine its compliance with the CASRs, its Air Operator certificate and operations specifications, or its eligibility to continue to hold Air Operator certificate. Any required coordination during DGCA inspections will be the responsibility of Operation Manager This function may be delegated as Appropriate

## **1.12. AIR OPERATOR CERTIFICATE (AOC), AUTHORIZATION, CONDITIONS AND LIMITATIONS (ACL) AND OPERATION SPECIFICATION (OPSPECS)**

The Air Operator Certificate (AOC), Operations Specifications (Opspecs) and Authorization Conditions and Limitations (ACL) of Smart Cakrawala Aviation has been reproduced and placed in this section immediately following this page to inform Company personnel what services are authorized and the conditions that may be attached to them.

### **1.12.1. Air Operator Certificate**

The Air Operator Certificate will contain the following information:

1. The number of the Air Operator Certificate,
2. The legal name of the Smart Cakrawala Aviation,
3. The date and place of issue of the Air Operator Certificate,
4. The general conditions attached to the Air Operator Certificate,
5. The Operation Specifications setting forth the nature, conditions and limitations placed on Smart Cakrawala Aviation.

### **1.12.2. Duration of Validity and surrender of Air Operator Certificate, Operation Specifications and Authorization, Conditions and Limitations (ACL) (CASR 135.23)**

Smart Cakrawala Aviation's Air Operator Certificate shall be considered valid for two years unless --

1. Smart Cakrawala Aviation surrenders it earlier to the DGCA; or
2. The DGCA suspends, revokes, or otherwise earlier terminates the Certificate due to the violation by the Smart Cakrawala Aviation; or
3. Smart Cakrawala Aviation does not conduct or cease all Operation for which it holds authority in its Operation Specifications for more than the time specified below:
  - a) If Smart Cakrawala Aviation does not conduct or cease Operation for 90 consecutive calendar days, the certificate holder will be issued three (3) consecutive warning letters, each at interval of one (1) month;
  - b) If Smart Cakrawala Aviation does not respond to the warning letters, the certificate will be suspended for a maximum of three (3) months;
  - c) If the suspension period is over and there is no effort made for the resumption of the Operation, the certificate will be revoked.
4. Smart Cakrawala Aviation violates the provision of Aviation Act No. 1 year 2009 as the basis for granting of the certificate, or violate requirements to conduct operation of its organization in accordance with authority granted, limitation imposed and procedures approved as they are specified on its Operation Specifications; or
5. Smart Cakrawala Aviation applies for renewal of validity of his Certificate.
6. If Smart Cakrawala Aviation Air Operator Certificate has been suspended, revoked or terminated, within 7 days the Air Operator Certificate and

Operations Specifications and Authorization, Conditions and Limitation will be surrendered to the DGCA

**NOTE:**

Copy of Air Operator Certificate (AOC) will be attached in the Appendix of this Operations Manual Part A.

**1.12.3. Operation Specification and Authorization, Condition and Limitations (ACL) (CASR135.25)**

The Authorization, Condition and Limitations (ACL) and Operations Specifications are attachment of the Air Operator Certificate. The ACL and Operation Specifications transform the general terms of applicable regulations into an understandable tailored to the specific needs of an individual certificate holder at least contain the following:

1. Business Address and Telephone number of the aircraft,
2. Specific location of Smart Cakrawala Aviation home base,
3. Organization of Flight Operation including approved incumbents,
4. Technical organization including the approved incumbents,
5. Operation and Technical manual approval dates,
6. The categories of air transportation services authorized,
7. Region of Flight Operation,
8. Flight rules must applicable to the service,
9. Forms of air transportation service authorized,
10. Categories of aircraft approved,
11. Maintenance Program of each aircraft,
12. The list of aircraft
13. any other item the Director determines is relevant to the issue of the Air Operator certificate

**1.12.4. Availability of Air Operator Certificate, ACL and Operations Specifications (135.33)**

Smart Cakrawala Aviation will display the Air Operator Certificate and Operations Specifications at Smart Cakrawala Aviation's home base, in a place that accessible and conspicuous where it is readily available for inspection by the DGCA.

**1.12.5. Amendment to or Additional ACL and Operations Specifications (135.31)**

Smart Cakrawala Aviation Operations Specifications and ACLs may be amended, or additional Operations Specifications and ACL are issued by DGCA:

1. Upon application by Smart Cakrawala Aviation, if DGCA determines that:
  - a) The additions, changes or deviations applied for, are in compliance with CASR 135,
  - b) Such additions, changes or deviations are applied for in a form and manner prescribed by DGCA, and
  - c) The DGCA is of opinion that an acceptable level of safety can be maintained, and such operation would be in the public's best interest.

Where the DGCA decides to refuse approval of Smart Cakrawala Aviation application, Smart Cakrawala Aviation may, within 30 days of notification of such refusal, petition the DGCA to reconsider that decision.

2. At DGCA discretion where DGCA is of the opinion, that such amendment or addition is essential to flight safety and is in the public's best interest, where the DGCA decides to amend Smart Cakrawala Aviation Operations Specifications and ACLs under DGCA discretion, DGCA will:
  - a) Give Smart Cakrawala Aviation written notice of proposed amendment, stating the reason for such amendment,
  - b) Allow a reasonable period of time (but not less than 7 days) for Smart Cakrawala Aviation to make written representation on the matter of the proposed amendment, or the date such amendment would come into force.
  - c) After considering any representation, notify Smart Cakrawala Aviation of DGCA decision to either impose the amendment, or rescind the notice of proposed amendment.

Except where safety concerns require immediate compliance, where DGCA decides to issue the amendment, the effective date of that amendment will commence not earlier than 30 days after the date of issue.

The DGCA may require Smart Cakrawala Aviation to submit for approval, prior to the effective date of any amendment, anything deemed necessary to fully comply with the amendment.

#### **1.12.6. Renewal of Validity of Air Operator Certificate (135.32b)**

The continued validity of an AOC is dependent upon how Smart Cakrawala Aviation maintaining the requirements for an adequate organization, method of control and supervision of flight operations, training program as well as ground handling and maintenance arrangements consistent with the nature and extent of the operations specified in the AOC and the associated Operations Specifications and Authorization, Conditions and limitations.

Smart Cakrawala Aviation will apply for renewal of the AOC to the DGCA at least 60 consecutive days before expiration date of the Air Operator Certificate, to allow sufficient time for the DGCA conduct a quality audit to determine whether the Smart Cakrawala Aviation remains in compliance, in conformance and in adherence with appropriate regulations.

#### **1.12.7. DGCA Inspection Authority (135.37)**

Smart Cakrawala Aviation and each person employed by Smart Cakrawala Aviation will allow the DGCA to inspect inspection system, records, and procedures to determine compliance with CASR at any reasonable time to determine its compliance with the CASRs, its Air Operator certificate and operations specifications, or its eligibility to continue to hold Air Operator certificate.

Any required coordination during DGCA inspections will be the responsibility of Operations Manager and Technic Manager. This function may be delegated as appropriate.

## **1.13. COMPANY MANUALS**

All PT. Smart Cakrawala Aviation aircraft will be operated in accordance with the current approved flight manuals. These manuals include, the current POH, SOP, MEL, IFR charts and IFR manual, Emergency procedures, approved checklists, OM's, and any other manual required by the CASR's or by PT. Smart Cakrawala Aviation.

### **1.13.1. Pilot Operating Handbook (POH)**

Company aircraft shall be operated at all times in accordance with the limitations and conditions as contained in the approved Pilot Operating Handbook (POH).

*POH must be carried onboard the aircraft.*

### **1.13.2. Maintenance Program (MP)**

Approved Maintenance Program contains all the procedure inspection program.

*For detail see Approved Maintenance program.*

### **1.13.3. Operations Manual (OM)**

The OM contains all the information Part A, B, C, D related operational policies, procedures, instructions and guidance required for operation PT. Smart Cakrawala Aviation.

### **1.13.4. Dangerous Goods / Hazardous Materials Manual (DGHM)**

Dangerous Goods / Hazardous Materials Manual contains all the information required to handle, packing and transport dangerous goods. All personnel are required to refer to this manual when handling dangerous good.

*For detail see Dangerous Goods / Hazardous Materials Manual.*

### **1.13.5. Aircraft Minimum Equipment List (MEL)**

When an aircraft system malfunction or un-serviceability is found, the pilot must be able to readily determine whether or not it is both safe and legal to dispatch the aircraft.

When an aircraft for which a MEL has been approved, and a defect is found, the operator must have, and flight crews must comply with, any conditions or restrictions contained in the MEL.

When an MEL has not been developed and approved for an aircraft type, an approved deferral procedure is available for certain items. This procedure requires a pilot to contact maintenance operations control through the OCS to determine if the defect is an airworthiness issue that must be rectified before further flight or one that can be deferred in accordance with the approved deferral procedure in the Company Maintenance Manual.

When neither of the foregoing is applicable and when an un - serviceability exists, the aircraft may not be flown until the defect is rectified and the required certifications made. However, the aircraft may be flown under the authority of a Flight Permit issued for ferry purposes to affect a repair.

When an MEL has been approved for an aircraft, the OCS will advise the pilot of the MEL items on the aircraft, however it will remain the responsibility of the PIC to review the Maintenance Logbook for recent history, and in particular for MEL items. This will ensure that he is knowledgeable with respect to deferred items and any restrictions that may apply. The PIC shall record and report all defects in accordance with the procedures detailed in the Aircraft Flight & Maintenance Log.

#### **1.13.6. Company Maintenance Manual (CMM)**

Company Maintenance Manual contains all the information required to procedure and policy for all personnel Maintenance.  
*For detail see Company Maintenance Manual.*

#### **1.13.7. Standard Operating Procedures (SOP)**

Standard Operating Procedures. procedures may use the challenge and response method of ensuring a high level of safety is achieved through crew coordination in the handling of routine, normal and emergency situations.  
*How to Procedure Flight for detail see SOP.*

#### **1.13.8. Safety Management System Manual (SMSM)**

Safety Management System Manual contains all the information required to safety procedure, hazard report, Internal Audit.  
*For detail see Safety Management Manual*

#### **1.13.9. Air Operator Security Program (AOSP)**

Approved Air Operator Security Program (AOSP) contains all the procedure security program.  
*For detail see PT Smart Cakrawala Aviation Air Operator Security Program (AOSP)*

#### **1.13.10. Rotorcraft Flight Manual (RFM)**

Company aircraft shall be operated at all times in accordance with the limitations and conditions as contained in the approved Rotorcraft Flight Manual (RFM).  
RFM must be carried onboard the aircraft.

## **1.14. DEFINITIONS AND ABBREVIATIONS**

### **1.14.1. Definitions**

**Airplane** - A power driven, heavier than air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.

**Alternate Aerodrome** - Is one at which landing performance requirements can be met and has the necessary facilities and services.

**Air Operator Certificate Holder** - Mean a person who undertakes directly by lease or other arrangements to engage in air transportation.

**Aircraft** - Any machine that can derive support in the atmosphere from the reaction of the air other than reactions of the air against the earth's surface.

**Altitude** - The vertical distance of a level, a point or an object considered as a point, measured from mean sea level.

**Autorotation** - Means a rotorcraft flight condition in which the lifting rotor is driven entirely by action of the air when the rotorcraft is in motion

**Captain** - A pilot qualified on an aircraft and responsible for the safe operation of that aircraft.

**Competency Check (CC)** - Any required operational check performed on company personnel (other than flight crews), by company supervisory personnel duly authorized to perform that check.

**Company Check Pilot (CCP)** – An employee of an air carrier who is the holder of a delegation of authority issued by the Director, authorizing the conduct of certain types of flight checks.

**Flight crew** - A person assigned to official duty on board an aircraft.

**Elevation** - The vertical distances of a point or a level on or affixed to the surface of the earth measured from mean sea level.

**Extended Over Water Operation** - For the purposes of this Part, a flight is considered to be in extended over water Operation, when it extends beyond the point where special equipment, procedures and/or passenger briefings are required for such Operation.

**Emergency Oxygen** - the oxygen flow is very high and the system should therefore only be used to revive a Flight crews, when a mask is leaking severely, or when the regular valve is unserviceable.



**First Officer (FO)** - A pilot qualified on an aircraft to perform the duties of second in command. May also be taken to mean co-pilot.

**Flight** - An aircraft is deemed to be in flight any time it is no longer in contact with the earth's surface as the result of its weight being supported by the aerodynamic principles and design features of that particular aircraft.

**Flight crew** - A Flight crew assigned to duty in an aircraft as a pilot, flight engineer, second officer or navigator.

**Flight Duty Time** - The total elapsed period from the time a Flight crew is required to report for duty; to the time that Flight crew has completed all official duties with respect to a flight or series of flights and is released for an official crew rest.

**Flight Following** - Flight following Is the monitoring of the flight's progress, the provision of such operational information as may be requested by the PIC, and the notification of Operations Manager or his delegate and the appropriate search and rescue authorities if the flight is overdue or missing. Meteorological information provided to the PIC may include analysis or interpretation only if provided by a qualified Flight Operation Officer. All flights operated by PT. PT. Smart Cakrawala Aviation shall have access to a qualified Flight Operation Officer at Flight Operation Control System at any time.

**Flight Time** - The total elapsed time from the moment the aircraft first moves under its own power for the purpose of take-off, until the time it comes to rest at the end of the flight.

**Flight Watch** - The process by which a qualified flight Operation officer provides flight following services to a flight, and provides any operational information as may be requested by the pilot in command or deemed necessary by the flight Operation officer.

**Government Check Pilot (GCP)** - A DGCA inspector authorized to perform flight checks.

**Height** - The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.

**Helicopter** - means a rotorcraft that, for its horizontal motion, depends principally on its engine driven rotors or an aircraft which is heavier than air, capable of flying with rotary wings, and travels by its own power

**Heliport** - Means an area of land, water, or structure used or intended to be used for the landing and takeoff of helicopters

**Large Aircraft** - Any aircraft having a maximum certified take-off weight, (MCTOW) of greater than 5700 kg (12500 pounds).

**License** - A document issued by, or under a delegation of authority from the Director, which authorizes the holder to exercise certain privileges as specified in that license, subject to the conditions and limitations contained therein.

**Main Rotor** - Means the rotor that supplies the principal lift to a rotorcraft

**Multi-Landing Operation** – Any helicopter operation where a pilot performs 30 takeoff and landings within a 24-hour period

**Operational Control System-OCS** - Means an air carrier's system for the exercise of authority over the formulation, execution and amendment of an operational flight plan in respect of a flight or series of flights

**Passenger** - Any person on board an aircraft during flight time, who is not acting as a Flight crew.

**Pilot Flying (PF)** - The flight Flight crew who is manipulating the flight controls of an aircraft during flight time.

**Pilot In Command (PIC)** - A pilot assigned to act as the Captain of an aircraft.

**Pilot Monitoring (PM)** - The pilot who is performing tasks during flight time, in support of the pilot flying.

**Pilot Proficiency Check (PPC)** - A flight check performed in whole or in part, in an aeroplane type simulator or an aircraft. Conducted by a GCP, CCP, or DGCP for the purpose of establishing the level of proficiency, of a flight Flight crew.

**Pilot Self-dispatch** - Means a system where authority and responsibility for flight release, operation and flight following have been delegated solely to the PIC.

**Remote Area** - Means an area of land considered hostile to survival, which lies beyond a specified radius from any known civilization, development or surface conveyance, through which refuge could reasonably be sought. Such radius is equal to 25 nautical miles in the case of mountainous or jungle areas, 50 nautical miles in the case of unoccupied land mass surrounded by water and in all other areas, 100 nautical miles. The Director may designate other areas as remote based upon unique consideration.

**Required Day Off** - A period of time consisting of 24 consecutive hours, commencing at 0000 local time, in which a pilot, or flight Operation officer are free from all duties or contact by the company. A required day off is considered to be taken at a person's residence and is exclusive of any travel time between that person's residence, and the place where such person reports for, or is released from duty.

**Rest Period** - The period of time during which a Flight crew is released from all official duty or contact by the company. This rest period not less than 8 hours must exclude all time spent commuting by the most direct route, between the company designated rest facility and assigned duty station and, a specified period of prone rest with at least one additional hour provided for physiological needs.

**Rotorcraft** - means a heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors

**Rotorcraft Load Combination** - means the combination of a rotorcraft and an external-load, including the external-load attaching means. Rotorcraft-load combinations are designated as Class A, Class B, Class C, and Class D, as follows:

**Class A** - means one in which the external load cannot move freely, cannot be jettisoned, and does not extend below the landing gear.

**Class B** - means one in which the external load is jettisonable and is lifted free of land or water during the rotorcraft operation.

**Class C** - means one in which the external load is jettisonable and remains in contact with land or water during the rotorcraft operation.

**Class D** - means one in which the external-load is other than a Class A, B, or C and has been specifically approved by the DGCA for that operation

**Seating Capacity** - The maximum number of passenger seats authorized by, the type certificate, type approval, or other equivalent document.

**Second in Command (SIC)** - A pilot assigned to act as a first officer or co-pilot of an aircraft

**Single Pilot** – the operation of an aircraft with only one pilot on board

**Supplemental Air Carrier** - An air carrier whose Operation specifications authorize charter or all cargo Operation.

### 1.14.2. Abbreviation

The following abbreviations may appear in this manual:

AAIP	Approved Aircraft Inspection Program Manual
A/C	(a/c) Aircraft
ACL	Authorization, Conditions, and Limitations
ADF	Automatic Direction Finder
AFL	Aircraft Flight Log
AGL	Above Ground Level
ALT	Altitude
AML	Aircraft Maintenance Log
Amp	Ampere
AOC	Air Operators Certificate
AP	Autopilot
ASI	Airspeed Indicator

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ATA	Actual time of Arrival
ATC	Air Traffic Control
AUX	Auxiliary
BMKG	Badan Meteorologi Klimatologi dan Geofisika
BN2T	Britten-Norman 2 Turbine
BRG	Bearing
CASR	Civil Aviation Safety Regulations
CCP	Company Check Pilot
CG (cg)	Centre of Gravity
CMM	Company Maintenance Manual
DGCA	Director General of Civil Aviation.
DGCP	Designated Government Check Pilot
DGHM	Dangerous Goods/ Hazardous Materials
DME	Distance Measuring Equipment
EOW	Empty Operating Weight
ETA	Estimated Time of Arrival
ETD	Estimated Time of Departure
FAF	Final Approach Fix
FAP	Final Approach Point
FATO	Final Approach and Take-Off Area
FMS	Flight Management System
FO	First Officer
OPERATIONS STAFF/	Flight Operation Officer
GCP	Government Check Pilot
GEN	Generator
GM	Gyro Magnetic
GPS	Global Positioning System
GPU	Ground Power Unit
HDG	Heading
HSI	Horizontal Situation Indicator
HYD	Hydraulic
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IMC	Instrument Meteorological Conditions
ISA	International Standard Atmosphere
MDA	Minimum Descent Altitude
MDH	Minimum Descent Height
MEL	Minimum Equipment List
MOCA	Minimum Obstruction Clearance Altitude
MORA	Minimum Off-route Altitude
M/R`	Main Rotor
MSA	Minimum Safe Altitude
MSL	Mean Sea Level
MTOM	Maximum Take-off Mass
MTOW	Maximum Take-off Weight

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N/A	Not Available/Applicable
NAV	Navigation
OM	Operation Manual
PAS	Public Address System
PAX	Passenger
PF	Pilot Flying
PIC	Pilot In Command
PM	Pilot Monitoring
PPC	Pilot Proficiency Check
POH	Pilot Operating Handbook
QDM	Magnetic Bearing To The Station
QDR	Magnetic Bearing From The Station
QFE	Atmospheric Pressure at Aerodrome Elevation (circuits)
QFE	Atmospheric Pressure at Threshold elevation (landing)
QNH	Atmospheric Pressure at Mean Sea Level
RH	Right Hand
SMM	Safety Management Manual
SOP	Standard Operating Procedure
STBY	Standby
T/R	Tail Rotor
TGB	Tail Rotor Gearbox
UHF	Ultra High Frequency
UTC	Universal Time Co-ordinate
V/S	Vertical Speed
V1	Critical Decision Speed
V2	Take-off Safety Speed
VNE	Never Exceed Speed
VNO	Normal Operating Speed
VFR	Visual Flight Rules
VMC	Visual Meteorological Conditions
VOR	VHF Omni directional Range
VSI	Vertical Speed Indicator
WX	Weather

**2. ORGANIZATION AND RESPONSIBILITIES****2.1. PT. SMART CAKRAWALA AVIATION ORGANIZATION****2.1.1. General**

PT. Smart Cakrawala Aviation is responsible for establishing adequate facilities, instituting suitable Procedures and Practices, and the employment of adequate numbers and suitable qualified personnel to provide safe Commercial Air Charter.

**2.1.2. Company Registered Name and Address****PT. Smart Cakrawala Aviation****Head Office address:**

Jl. Cideng Timur No.16A, Petojo Utara, Gambir, Jakarta Pusat

**Operational Office:**

Jl. Pantai Indah Selatan No. 4 Rt04/Rw03, Kamal Muara, Penjaringan, Jakarta Utara.

Phone : (+6221)-50112330

Email : [info@smartaviation.co.id](mailto:info@smartaviation.co.id)  
[occ@smartaviation.co.id](mailto:occ@smartaviation.co.id)

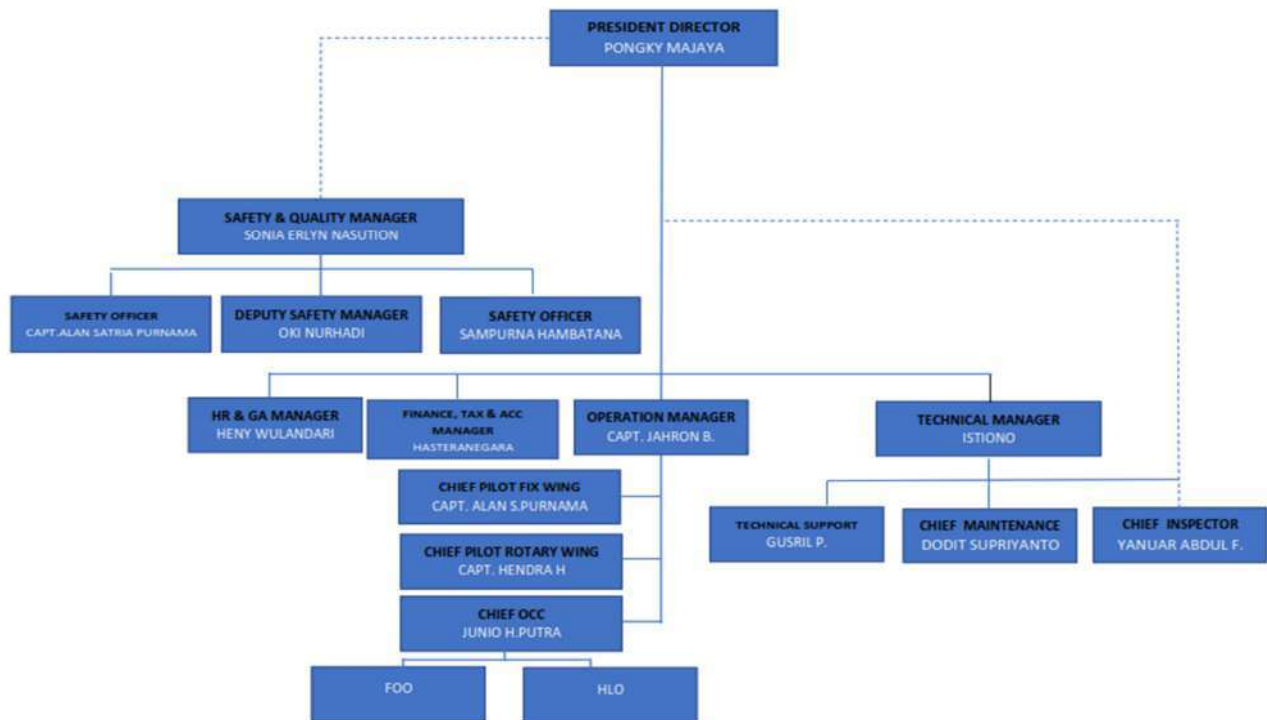
**2.1.3. Types of Aircraft Operated**

PT. Smart Cakrawala Aviation is authorized to conduct on demand aircraft operation pursuant to CASR 135 on carriage of passengers and aerial flight survey in non- scheduled operation within Republic of Indonesia territory with the following type of aircraft as listed:

NO	TYPE OF AIRCRAFT	MANUFACTURE	ENGINE MODEL	PROPELLER
1	Cessna Grand Caravan 208/208B	Textron Aviation Inc.	PT6A-114 PT6A-140	Mc Cauley Hartzell
2	EC 130 T2	Eurocopter	Arriel	-
3	Pilatus PC-6 B2/H4	Pilatus Aircraft Ltd	PT6A-27	Hartzell

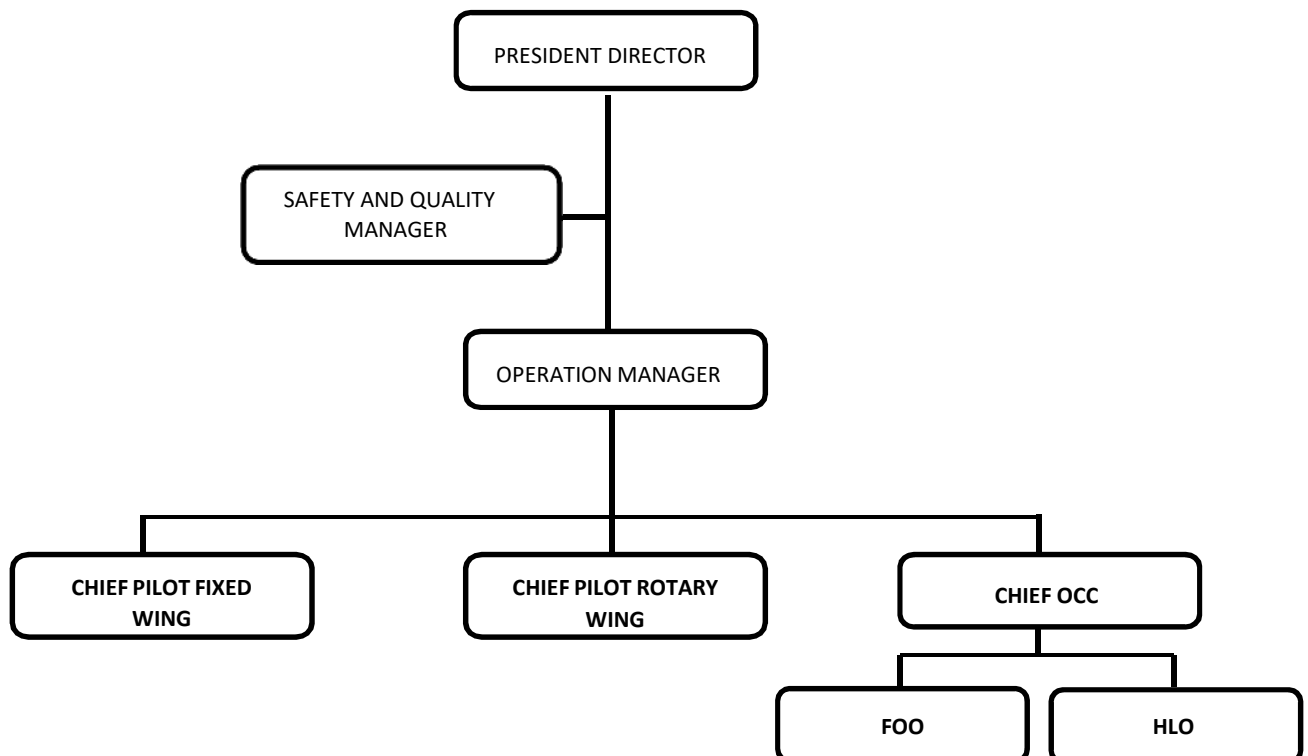
### 2.2. ORGANIZATION CHART

#### 2.2.1. PT. Smart Cakrawala Aviation Organization Chart



#### 2.2.2. PT. Smart Cakrawala Aviation Operations Department Organization Chart

PT. Smart Cakrawala Aviation Operations Department Organization Chart



**2.3. PT. SMART CAKRAWALA AVIATION MANAGEMENT PERSONNEL.****2.3.1. Management Personnel and Contact Number**

No	Description	Names	No Handphone
1	President Director	Pongky Majaya	0821 1413 7183
2	Safety And Quality Manager	Sonia Erlyn Nasution	0852 21331 3129
3	Operation Manager	Capt A.Jahron Burhan	0812 9681 955
4	Chief Pilot Fixed Wing	Capt. Alan Satria Purnama	0899 2023 637
5	Chief Pilot Rotary Wing	Capt. Hendra Haryono	0811 1807 735
6	Technical Manager	Istiono	0821 1161 0580
7	Chief Inspector	Yanuar Abdul Fatah	081 857 0533

**2.3.2. Change of Management Personnel**

Where any change to the list of approved managers is proposed or has taken place beyond the company's control, the Smart Cakrawala Aviation will notify the DGCA within 7 days, of any temporary assignments to these positions and within 30 days, submit a nomination requesting approval for the new candidate.



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## **2.4. DUTIES, RESPONSIBILITIES AND QUALIFICATION (CASR 135.47)**

### **2.4.1. President Director**

The President Director is the Accountable Manager, and he is responsible for ensuring the entire operation of the company in-compliance with standards required by the DGCA Indonesia or other relevant civil authority.

He is responsible for ensuring that the necessary finance, manpower resources and facilities are available to enable the company to perform the company operation to which it is committed for and any additional work which maybe under taken.

The President Director shall have the ultimate authority and responsibility to ensure compliance with all laws, regulations, and rules governing company operation.

The President Director shall appoint and authorize each Department Head in accordance with his/her Department job description with standard DGCA or Indonesia's regulation.

### **2.4.2. Safety And Quality Manager**

Responsible to President Director

Detail Duties and Responsibilities: Refer to Safety Management System Manual (SMSM)

## **2.4.3. Operation Manager**

Operation Manager is responsible to the President Director for safe flight operation, and in particular:

1. Will assist and advise the President Director on all operational aspects of Company operations and will maintain close links with customers on a regular basis.
2. Has overall responsibility for the promulgation of ground and flight training for air and ground crew considered necessary to meet the requirements of the Company and current authority legislation.
3. Review and amend the Operations Manuals on a regular basis. Raise and distribute amendments to the OM as required and ensure all those on the distribution list receive, acknowledge and comply with all such amendments.
4. Shall maintain close links with the Technical Manager with regard to interfacing the maintenance and operational requirements of the operation for planning purposes.
5. Has the authority to take corrective actions when irregularities which are in conflict with the Company manuals and/or Company policies are perceived.
6. Is responsible to the President Director for ensuring all Company operations are carried out in accordance with Operations manuals. Additionally, he/she is responsible for crew training, crew rostering, planning, discipline etc. Major elements of these responsibilities will be delegated to his/her subordinates.
7. Ensuring that the President Director and customers are informed immediately following any incident, accident or occurrence that may have taken place during the operation of a customer's contracted aircraft or whilst meeting contractual obligations.
8. Is responsible through his/her subordinates for maintaining the files and records of all Flight Crew and will ensure that all manuals and other relevant flight-papers are in good order.
9. Is responsible for the onsite preservation of all training records of all flight crew.
10. Has the authority to discipline Flight Crew in accordance with the procedures laid down in the relevant manuals.
11. Is responsible for ensuring that the facilities under his/her control at all Company operating bases are maintained to a high standard of order and cleanliness.
12. Is responsible for continuing flight in Unsafe conditions.

### **Qualifications required:**

1. Knows the contents of the PT. Smart Cakrawala Aviation Operations Manual, Operation Specifications, Airworthiness Conditions & Limitations, and the provisions of this part necessary to the proper performance of his/her duties and;
2. Holds, or has held, an Airline Transport Pilot License (or a Commercial Pilot License, if none of the aircraft utilized by the PT. Smart Cakrawala Aviation require an airline transport license), and
3. Has had at least three (3) years' experience as Pilot-In-Command of similar types of aircraft with which the operation are to be conducted; or,
4. Has had at least three (3) years' experience as Operation Manager or a position of comparable responsibility with an air carrier using similar types of aircraft.

## **2.4.4. Chief Pilot fixed Wing and Rotary Wing**

Chief Pilot Fixed wing and Rotary Wing are directly responsible to the Operations Manager, He shall carry out those tasks delegated to him by the Operations Manager which shall include but are not limited to related fixed wing aircraft

1. Responsibility for basic aircrew scheduling in co-ordination with the Flight Operation Support.
2. Responsibility for production of the daily flight program.
3. Responsibility for filing and distribution of the Work and Rest Time data.
4. Responsibility for the efficient recording of all operational logs.
5. Responsibility for aircrew accommodation and transport facilities.
6. Working closely with the Operation Movement Center (OCC) to ensure that the daily flight schedule is carried out in a safe and efficient manner.
7. Immediately informing the Operations Manager of any aspect of daily Operation that may require follow-up either with the customer or the authorities
8. Ensuring that all aircrew carry out their duties in accordance with the Company approved manuals.
9. Ensuring the well-being and general discipline of all aircrew and operational staff and informing the Operations Manager of any matter relating to collective or individual performance or discipline
10. Maintaining close links with the Technical Manager with regard to interfacing daily Maintenance and operational requirements of the operation
11. Exercising his authority to take corrective actions when irregularities which are in conflict with the Company manuals and/or company policies are perceived.
12. Advising the Operations Manager on the number of aircrew required as well as aircrew planning and rostering in conjunction with the Flight Support in order to ensure the safe, efficient and cost effective execution of all contracted requirements.
13. Responsibility, in conjunction with Operation Library, for maintaining all documents on board all company aircraft up-to-date.
14. Ensuring that the facilities under his control at all Company operating bases are maintained to a high standard of order and cleanliness
15. Responsibility for filing and updating aircrew files and, with the assistance of Training Captains, aircrew training files.
16. Screening new pilot applicants and forwarding recommendations to the Operations Manager;
17. Liaison with the Safety And Quality Manager and Operations Manager relative to all Company Standard Operation Procedures;
18. Formulate new Operation procedures when required and periodically review existing ones;

19. Formulate and assist in implementation of Standard Safety Procedures within the Company;
20. To assist the Operations Manager in whatever way required insuring efficient safe administration of the Operation Department;
21. Ensure all pilots comply with all DGCA regulations, Company Directives and the Operations Manual
22. Delegating those responsibilities to his staff as he sees fit whilst maintaining overall responsibility.
23. Participating in the safety management system

**Qualifications required:**

1. Chief Pilot must hold a current Airline Transport Pilot License or a Commercial Pilot License, with appropriate ratings of the aircraft utilized by PT. Smart Cakrawala Aviation.
2. He/she must know the contents of PT. Smart Cakrawala Aviation Operations Manual, Operation Specifications, and Authorization Conditions Limitations.
3. Has accumulated not less than 1,000 hours as Pilot-In-Command on similar types of aircraft or, within the preceding five (5) years, has acted as Pilot-In-Command for at least three (3) years and accumulated not less than 500 hours as Pilot -In- Command on similar types of aircraft flown by PT. Smart Cakrawala Aviation.

#### **2.4.5. Technical Manager**

Responsible to President Director.

Detail Duties and Responsibilities: Refer to Company Maintenance Manual (CMM).

#### **2.4.6. Chief Inspector**

Responsible to Technical Manager.

Detail Duties and Responsibilities: Refer to Company Maintenance Manual (CMM).

#### **2.4.7. Pilot In Command (PIC)**

The PIC is responsible for the preparation and execution of the flight, and has the final authority as to the safety of the aircraft and its occupants. He has the authority to take such measures as necessary for the safety of the flight, and take such reasonable actions to maintain order and discipline on board.

Smart Cakrawala Aviation will nominate one of the pilots to be in command for each flight or series of flights.

- a. Maintain familiarity with all relevant aviation regulations, notices, circulars and procedures.
- b. Keep his or her assigned navigation charts current and up to date
- c. Maintain familiarity with the contents of this Operations Manual.
- d. Notify the Chief Pilot whenever the pilot may violate any rule due to being dispatched on a flight
- e. Responsible for all factors affecting the safety of that flight

### The Pilot-in-Command specific responsibilities:

- a. Be responsible for the safe operation of the aircraft and safety of its occupants and cargo during flight time;
- b. Have authority to give all commands he deems necessary for the purpose of securing the safety of the aircraft and of persons or property carried therein, and all persons carried in the aircraft shall obey such commands;
- c. Have the authority to disembark any person, or any part of the cargo, which in his opinion, may represent a potential hazard to the safety of the aircraft or its occupants;
- d. Not allow a person to be carried in the aircraft who appears to be under the influence of alcohol or drugs to the extent that the safety of the aircraft or its occupants, is likely to be endangered.;
- e. Have the right to refuse transportation of inadmissible passengers, deportees or persons in custody if their carriage poses any risk to the safety of the aircraft or its occupants;
- f. Ensure that all passengers are briefed on the location of emergency exits and the location and use of relevant safety and emergency equipment;
- g. Ensures that all operational procedures and checklists are complied with;
- h. Ensure that the weather forecast and reports for the proposed operating area and flight duration indicate that the flight may be conducted without infringing any minima as stated in this Operations Manual;
- i. Decide whether or not to accept an aircraft with un-service items allowed by the MEL or approved Aircraft Flight Manual;
- j. Ensure that the pre-flight inspection has been carried out;
- k. In an emergency situation that requires immediate decision and action, take any action he considers necessary under the circumstances. In such cases he may deviate from rules, operational procedures and methods in the interest of safety. This requirement shall be the responsibility of the commander or the pilot to whom the conduct of the flight has been delegated;
- l. Ensure that the weather forecast and reports for the proposed operating area and flight duration indicate that the flight may be conducted without infringing company operation minima;
- m. Before commencing take-off be satisfied that, according to the information available to him, the weather at the airport intended to be used should not prevent a safe take-off and departure, and before commencing an approach to land be satisfied that, according to the information available to him, the weather at the airport and the condition intended to be used should not prevent a safe approach, landing or missed approach, having regard to the performance information contained in this Operations Manual;
- n. In the absence of a qualified company engineer, ensure that aircraft refueling is supervised with particular attention being paid to:
  1. The correct grade and amount of fuel;
  2. Fuel water checks;
  3. Fire safety precautions;
  4. Checking filler caps for security and correct replacement after refueling;

5. Take all reasonable steps to ensure that the aircraft mass and balance is within the calculated limits for the operating conditions;
6. Confirm that the aircraft's performance will enable it to complete safely the proposed flight;
7. not permit any crew member to perform any activity during take-off, initial climb, final approach and landing except those duties required for the safe operation of the aircraft;
- o. Take all reasonable steps to ensure that whenever the aircraft is taxiing, taking off or landing, or whenever he considers it advisable (e.g. in turbulent conditions), all passengers are properly secured in their seats, and all cabin baggage is stowed in the approved stowage;
- p. Maintain a high personal standard of discipline, conduct and appearance as are presentative of the company;
- q. Ensure that a continuous listening watch is maintained on the appropriate radiocommunication frequencies at all times whenever the flight crew is manningthe aircraft for the purposes of commencing and/or conducting a flight and taxiing;
- r. Ensure that Air Traffic Services are used for all flights whenever available;
- s. Ensure that the documents and manuals are carried and remain valid throughout the flight or series of flights and be produced, when requested, to a person authorized by the DGCA;
- t. Ensure that abnormal or emergency situations, system malfunctions and IMC conditions are not simulated for any purpose on public transport flights;
- u. Ensure that the amount of useable fuel remaining in flight is not less than the fuel required to proceed to airport where a safe landing can be made, with final reserve fuel remaining;
- v. Declare an emergency when the actual usable fuel on board is less than final reserve fuel.
- w. Participating in the safety management system

### **1. Pilot Authority The PIC has the authority to:**

1. Apply increased safety margins including airport/heliport operating minima, if he deems it necessary.
2. Give assistance to other aircraft or vessels in emergency or distress whenever he considers it appropriate.
3. Give all commands he deems necessary for the purpose of securing the safety of the aircraft and of persons or property carried therein. All persons carried in the aircraft shall obey such lawful commands.
4. Disembark any person or any part of the cargo which, in his opinion, may represent a potential hazard to the safety of the aircraft or its occupants.

### **2. Restriction or Suspension of Operations**

When company operations staff or pilot in command knows of conditions, including airport and runway conditions, that are a hazard to safe operations, the operations staff or pilot in command, as the case may be, shall restrict or suspend operations until those conditions are corrected.

No pilot in command shall continue toward an airport of intended landing under the conditions set forth above, unless;

1. In the opinion of the pilot in command the conditions that are a hazard to safety may be reasonably expected to be corrected by the estimated time of arrival or,
2. There is with respect to that flight, an alternate airport to which the aircraft can divert to from any point along the route, maintaining required reserve and contingency fuel at all times, or
3. There is no safer alternative available to the PIC, in such case the pilot in command is considered to be acting under the force of an emergency.

## **2.4.8. Duties and responsibilities of crew members other than the PIC**

### **2.4.8.1. Second In Command**

#### **a. General**

The Second In Command:

- is the subordinate to the Chief Pilot and to the PIC during flight execution;
- is expected to report to the PIC and/or the Chief Pilot regarding the facts which may influence the quality of flight execution
- should have no doubt his condition and proficiency prior to start the flight execution.

#### **b. Flight Preparation**

The Second In Command shall:

- Acquaint himself with all relevant particulars and instructions concerning aircraft type and flight to be flown;
- Advise the PIC, if he found it necessary, any aspect that has been overlooked on the flight preparation.

#### **c. Flight Execution**

The Second In Command shall:

- perform all duties as described in the company manuals under the supervision of the PIC;
- assist in promoting an atmosphere in which a good understanding and cooperation between the crew members may be expected;
- be alert on developments which may endanger the safety of the flight. If he believes these developments exist, he shall:
  - a) Advise the PIC;
  - b) Ask the PIC to take appropriate action, if no response is given after second call, he shall take the appropriate action
  - c) If, in his/her opinion, strong doubts exist as to the physical or mental fitness of the PIC (incapacitation) and/or immediate action is required to prevent a highly critical situation, he must take such action (if possible in consultation and agreement with other crew members)



## **2.4.9. Chief Operations Control Center (OCC)**

Providing professional supports required to ensure safe, smooth and efficient flight operations by managing, coordinating and following all flight missions of Smart Cakrawala Aviation.

Responsible upon the operational control of Smart Cakrawala Aviation Flights, with safety being the primary concern by complying with the appropriate regulations, Company Operational Specifications and Company SOP's.

The responsibilities of OCC include, but are not limited to the following:

1. Developing and maintaining a professional work environment within the Smart Cakrawala Aviation Flight Operations Unit.
2. Ensuring that all Operation Personnel are well trained accordingly and valid.
3. Controlling and monitoring the scheduling of Pilots and Technical Personnel.
4. Responsible for controlling and monitoring all active flights, including:  
Flight Following, Aircraft availability and airworthiness, Operation and Crew Permits, Restrictions and Notams, Operation Administration and all other operation requirements and aspects.
5. Compliance with all safety regulations, Company Operational Specifications, Company SOP's, Dangerous Goods regulations and Safety Standards.
6. Liaising with Smart Cakrawala Aviation Clients and Service Providers to ensure smooth operations.
7. Ensuring the availability of flight approvals, over-fly permits, security clearance, special permits and any other required permits for the planned flight.
8. Ensuring the availability of hotel accommodation requirements for Crewmembers and supporting personnel while on duty.
9. Monitoring and ensuring that all crewmembers personal documentation are complied with and current, i.e. license, certificate, approval, authorization, passport, visa, Security Clearance, Medex, IMTA, KITAS, etc.
10. Supporting Chief Pilot in the monitoring of crewmembers initial and recurrent training.
11. Coordinating with Ground Handling agent regarding special requirements instructed by the Charterer.
12. Ensuring the validity of manuals, SOPs, flight navigation requirements, etc. onboard the aircraft.
13. Ensuring that radio communication equipment for operational coordination are in good condition.

14. Ensuring that aircraft logs are well managed.
15. Ensuring that aircraft daily movement report is submitted timely.
16. Provide management advice, knowledge, skills and expertise within the unit.
17. Maintaining Safety Management System within the Department.
18. Maintaining safety awareness at all time. Reporting and mitigating the identified safety and security hazards to ensure safe operations.
19. Execute corrective actions and procedures to rectify identified deficiencies within the Smart Cakrawala Aviation Flight Operations Unit.
20. Carrying-out assignments from the Operations Manager and the President Director.

#### **2.4.10. Helicopter Landing Officer (HLO)**

Helicopter Landing Officer is responsible to the Chief OCC.

Job descriptions:

1. Control the safe movement of all personnel on, and in the direct vicinity of the helicopter landing platform. This also includes disembarking and embarking passengers in cooperation with the helicopter crew.
2. Control of the loading and unloading of cargo on instructions of the helicopter crew.
3. Provision of manifests for passengers and cargo, and the required documentation for the safe transport of special loads.

#### **2.4.11. Flight Operation Officer (FOO)**

Flight Operations Officer is responsible to the Chief OCC. He shall carry out those tasks delegated to him by the Chief OCC which shall include, but are not limited to:

1. Develop pilot duty scheduling, day off schedule in accordance with the available rule and regulations to meet the optimum pilot production hours monthly and/or yearly.
2. Develop a specific flight briefing for all pilot duties in regards to the flight plan, weather forecast, and provide necessary navigational aid, ONC map, complete with its airways.
3. Assist pilots to prepare flight plan, providing weather reports, preparing passenger and cargo manifest and provide briefing to the flight crewmember before flight when requested.
4. Conduct provision of FOO staff duties to assist the aircraft loading activities by preparing and providing aircraft Load Sheet and its calculation and obtain Pilot in command acknowledgement for every company flight prior to departure.
5. Develop a regular monthly report to Operations Manager containing crew flight hours, crew off duty, holiday or medical examination, which shall be ready prior to the 7<sup>th</sup> day of the current month.
6. Conduct a good relationship with aircrew to make duties easier.
7. Ensure the availability of aircrew and keep coordination with Chief Pilot.
8. Establish records of pilot license number, type rating, total flight hours, on type production hours, monthly production hours and medical examination. The records

shall be updated and displayed in flight operation office for daily check and observation.

9. Plan, check and control the use of fuel and its administration.
10. Analyze of service ability of airport, airways, and navigational facilities
11. Develop and establish flight route, airways and plotted on the ONC map that shall be follow by all pilots in flying the aircraft and reporting their flight position to flight watch radio.
12. Carried out paper work activity for operational expenses and its administration.
13. Supervising each base as while on duty or in charge.



## **2.5. APPOINTMENT OF ACTING PERSONNEL**

When a person holding a management position expects to be unavailable to perform their day-to-day management duties due to vacation, days off, illness, flight schedule requirements, or other circumstances they will designate another person to perform their duties during the period of unavailability. Such appointments will be promulgated via e-mail message to all Smart Cakrawala Aviation personnel. In the case of short term or unanticipated absence, the following operation department personnel are delegated authority to exercise the authorities of the following positions in the order shown:

1. Operations Manager
2. Chief Pilot Fixed wing and Rotary Wing

## **3. OPERATIONAL CONTROL SYSTEM PT. SMART CAKRAWALA AVIATION**

### **Definitions**

Flight Following– the process of monitoring the progress of a flight, from its point of departure to its final destination including any e-route stops, and the notification of the appropriate authorities in the event of an overdue or missing aircraft.

Flight Watch– the process by which a qualified Operation staff (authorized person) provides flight following services to a flight and provides any operational information as may be requested by the pilot in command or deemed necessary by the operation staff (authorized person).

Flight Watch System– means PT. Smart Cakrawala Aviation’s equipment, facilities and personnel which enable that air carrier to exercise operational control over a flight in progress via direct and timely communications with that flight.

Operational Movement Control, (OCS)– means PT. SMART CAKRAWALA AVIATION system for the exercise of authority over the formulation, execution and amendment of an operational flight plan in respect of a flight or series of flights.

Operational Flight Plan (OFP)– The form used to detail all routes, alternates, fuel weight & balance, weather and operational data.

Pilot Self-Dispatch– means a system where authority and responsibility for flight release, operation and flight following have been delegated solely to the PIC.

### **Purpose**

Operational Movement Control is to ensure the operation of the flight in a safe, legal and efficient manner. Objective such above to manage all resources available to keep the flight program as close as possible to the schedule (punctuality) in coordination with all concerns consistent with company policy Operation Control System provides planning, controlling, monitoring, reporting and evaluation of the flights. This system contains aircraft and crewmember movements, dispatching, crews scheduling, recording and reporting.

The policy of the operational decision making based- on:

- Safety of the flight
- Schedule regularity and on time performance
- Good care over cargo, mail and baggage
- Economical efficiency

As aircraft operated by PT. Smart Cakrawala Aviation not for commuter services, then no Flight Operation Officer required dispatching the aircraft.

To support Operational Movement Control PT. Smart Cakrawala Aviation uses Pilot Self Dispatch systems for dispatching. But even though PT. Smart Cakrawala Aviation adopt self-dispatch system, Operation Staff will be provided to assist pilot to prepare

Flight Plan, weather reports, NOTAM, passenger and cargo manifest and other documents required related to the flight.

Operations Manager has responsibility of Operational Movement Control over each flight. Under the Pilot Self Dispatch System, it means the responsibility is delegated the solely to the Pilot in Command.

## **Operational Control Functions, Regulation & Procedure**

Operational control functions include, but are not limited to, the following:

- Ensuring that only those operations authorized by the Company Operations Specifications are conducted.
- Ensuring that the aircraft is properly maintained and in airworthy condition (aircraft scheduling).
- Ensuring that only crew members trained and qualified in accordance with the applicable regulations are assigned to conduct a flight.
- Ensuring that crew members are in compliance with flight and duty time requirements when departing on a flight (crew scheduling).
- Designating a PIC for each flight.
- Providing the PIC and other personnel who perform operational control functions with access to the necessary information for the safe conduct of the flight (such as weather, NOTAMs, and airport analyses).
- Specifying the conditions under which a flight may be dispatched or released (weather minimums, flight planning, airworthiness of aircraft, aircraft loading, fuel requirements, and security clearance [where applicable]).
- Ensuring that the systems (both ground & aircraft) used to navigate the aircraft over the selected route are adequate.
- Ensuring that all flights have proper ATC coordination.
- Ensuring that each flight has complied with the conditions specified for release before it is allowed to depart.
- Ensuring that when the conditions specified for a flight's release cannot be met, the flight is canceled, delayed, re-routed, or diverted.
- Monitoring the progress of each flight and initiating timely actions when the flight cannot be completed as planned, including diverting or terminating a flight.
- Ensuring flight control policies and procedures for flight crews and other operations personnel to follow in the performance of their duties.
- operations manual a clear statement to all employees that they must comply with the laws, regulations and procedures of those States in which operations are conducted
- training program that all of its pilots are familiar with the laws, regulations and procedures pertinent to the performance of their duties for the areas to be traversed, the aerodromes to be used and the air navigation facilities to be used.

- training program that other members of the flight crew are familiar with the laws, regulations and procedures pertinent to the performance of their duties
- pilot in command is responsible for operational control of all flights.
- Operational Movement Control in its operations manual and identify the roles and responsibilities of those involved with the Operational Movement Control.
- Each operator shall ensure that the pilot in command has available on board the aircraft all the essential information concerning the search and rescue services in the area over which the aircraft will be operated.

### **Responsibility for Operational Control System**

Overall responsibility for Operational Control rests with the Operations Manager.

The Pilot in Command is responsible for the pre-flight planning, delay, and dispatch release of a flight in compliance with the regulations and operations specifications.

Due to Operations Manager delegates duties to the Chief Pilot. Operations Manager and Chief Pilot not allowed to be scheduled at the same calendar days.

**Operations Manager** is responsible for:

1. Monitoring the progress of each flight;
2. Issuing necessary information for the safety of the flight; and
3. Cancelling or re-dispatching a flight if, in his opinion or the opinion of the pilot in command, the flight cannot operate or continue to operate safely as planned or released.
4. Immediately informing the Pilot in Command of changing weather phenomena, airport or any other condition that would affect the safety of flight.
5. Ensuring all the flight documents to be retained by the company are retained for a period of not less than 90 days or as otherwise determined by the DGCA.

Each Pilot in Command of an aircraft is, during flight time, in command of the aircraft, crew, passengers and other persons on board and is responsible for the safety of the passengers, crewmembers, cargo, and aircraft.

Each Pilot in Command has full control and authority in the operation of the aircraft, without limitation, over other crewmembers and their duties during flight time, whether or not he holds valid certificates authorizing him to perform the duties of those crewmembers.

No pilot may operate an aircraft in a careless or reckless manner so as to endanger life or property (CASR 91.13).

**The Operation Staff (authorized personnel)** is responsible for:

1. Preparation of the Operational Flight Plan as described for flights operated in accordance with VFR.
2. Provide Flight crew briefing if requested the Flight crew.
3. Monitoring the progress of each flight,
4. Issuing necessary information for the safety of the flight;
5. Assisting the captain in decision making with respect to the continuation, diversion or termination of a flight,
6. Follows the procedures during an emergency.



7. Immediately inform the Pilot in Command of changing weather, airport, or any other conditions that would affect the safety of flight.

**The Pilot in Command** is responsible for;

1. Review all dispatch documents relating to the proposed flight and signing for his acceptance of the flight release,
2. Providing the Operation Staff with flight information relating to the progress condition and arrival of the flight, if required,
3. Returning to the company, all flight documents required to be retained by the company and,
4. Conducting the flight in accordance with all published rules and regulations relating to such flight.
5. The safety of the passengers, crewmembers, cargo, and aircraft.
6. For determining whether his aircraft is in condition for safe flight. The pilot in command shall discontinue the flight when un-airworthy mechanical, electrical, or structural conditions occur (CASR 91.7).

**The Pilot in Command authority (CASR 91.3);**

1. The Pilot in Command of an aircraft is directly responsible for, and is the final authority as to the operation of that aircraft.
2. In an in-flight emergency requiring immediate action, the Pilot in Command may deviate from any rule to extent requirement to meet that emergency.
3. Each Pilot in Command who deviates from Paragraph (b) of this section shall, upon the request of the Director, send a written report of that deviation to the Director.

Each Pilot in Command of an aircraft is in command of the aircraft, crew, passengers and other persons on board and has full control and authority in the operation of the aircraft, without limitation, over other crewmembers and their duties during flight time, whether or not he holds valid certificates authorizing him to perform the duties of those crewmembers.

No pilot may operate an aircraft in a careless or reckless manner so as to endanger life or property (CASR 91.13).

**The Company** is responsible for:

Ensuring such communication equipment and facilities as appropriate to the flight watch or flight following system required, are in place and serviceable.

## **3.1. SUPERVISION OF OPERATIONS**

The Operations Manager is the utmost authority and has the main responsibilities in PT. Smart Cakrawala Aviation to exercise operational control and establish and maintain supervision of flight operations. The responsibilities for the supervision of the flight operations belong to Operations Manager.

The following requirements should be supervised by the Chief Pilot:

- a. Qualification and aptitude of the flight crew members and of the operations personnel:
  - Medical license validity
  - Flight license and rating qualification
  - Flight activity
  - Duty and rest time
  - Competence of the operations personnel for his designed duty.
- b. Nomination of the crew members for each flight:
  - Personnel required operating the type of aircraft involved.
  - Medical, flight license and rates qualification validity of the crew members appropriate to the scheduled flights.
  - Compliance of scheduled duty and rest time with the operational policy
- c. Safety of flights:
  - Checking, analyzing and storing flight and maintenance records for the statutory periods.
  - Informing the Safety and Quality Manager when analysis of flight records show deviations from the rules set in the operations manual. If necessary, corrective actions and information will be initiated.

## **3.2. SYSTEM OF DISSEMINATION ADDITIONAL OPERATIONAL INSTRUCTIONS AND INFORMATION**

PT. Smart Cakrawala Aviation had established a system for publication and issuance of operational notices.

All Flight Crewmembers responsible to check the operational information board for notices prior to commencement of each flight duty period and read any new material issued. OCC Staff are responsible to read and will brief the PIC on the presence of any new notices and the impact on the operation.

Where the information contained in these notices is intended to become permanent procedure or policy, they will be incorporated in the Operations Manual or the SOP with the next formal amendment. At such time the notice will be officially withdrawn from the Notice book and operational information board, and the list of effective notices will be amended to reflect the withdrawal. Internal Operator notices consist of four different publications which are:

### **a. Notice To Crew**

Notice To Crew; includes changes, notes and new applications related with company's operational policies and regulations. Additional operational instructions and information will be made the subject of Notice to Aircrew. These will be displayed on the notice boards of flight planning rooms from the time of issue whilst further copies will be distributed to all Operations Manual copy holders separately. Notice to Aircrew must be authorized by the Operations Manager or in his absence by Chief Pilot for publishing, removing, or ensuring it is permanently incorporated into the relevant part of the manuals, SOP, or other document. Notice to Aircrew must include the date of notice being created, effective date and period of validity. The Chief Pilot will control the promulgation, distribution and amendment of all Notice to Aircrew.

### **b. Operational Memo**

Operational Memo; includes also changes, new limits on the A/C which are published by the manufacturers, new limits on airport facilities and so on.

- Service deficiency of any navigation aid,
- Service deficiency of airport,
- Service deficiency of air traffic control procedure,
- Service deficiency of regulation,
- Known hazards to flight, including icing,
- Other potentially hazardous meteorological.

### **c. Flight Safety Memo**

Flight Safety Memo; informs all the Operations personnel about the incidents and/or accidents which occur somewhere in the world to pay attention, learn lessons and etc.

**d. Flight Training Memo**

Flight Training Memo; All the operational supplementary subjects on training purposes which needs to inform the crews as soon as practical.

PT. Smart Cakrawala Aviation operations notices which alerts to:

- **Technical Notices**

Specific technical notices, such as information on the aircraft performance that will be available on a particular runway which has temporarily shortened declared distances because a maintenance work for example.

- **Administrative Notices**

A change in telephone number for an operations office for example. Where internal publicity is required on matters which are not of an operational nature administrative notices will be circulated as required. These will take the form of:

1. Company Notices from the President Director.
2. Operations Manager's Memos
3. Chief Pilot's Memos
4. Safety And Quality Manager Memos

### 3.3. OPERATIONAL CONTROL CENTER

#### 3.3.1. General

Operation Control Center (OCC) gathers personnel, equipment, and information to help PICs plan and conduct their flights. OCC, flight support as flight following personnel, and communication equipment to link OCC with the Company's headquarters, Air Traffic Control and additional DGCA facilities, customers' offices and work areas, and company aircraft.

#### 3.3.2. Flight Following, Flight Watch Location and Facilities

NO	BASE OF OPERATION	LOCATIONS	FACILITIES
1	Head Office	<b>JAKARTA</b> Jl. Pantai Indah Selatan No. 4 Rt04/Rw03, Kamal Muara, Penjaringan, Jakarta Utara.	<ul style="list-style-type: none"> <li>• Phone: (+6221)-50112330</li> <li>• Email: <a href="http://www.smartaviation.co.id">www.smartaviation.co.id</a></li> <li>• SPIDERTRACK / Tracking Device</li> <li>• SMS or Cell Phone</li> </ul>
2	Operation Control Center (OCC)	<b>JAKARTA</b> Jl. Pantai Indah Selatan No. 4 Rt04/Rw03, Kamal Muara, Penjaringan, Jakarta Utara.	<ul style="list-style-type: none"> <li>• Phone: (+6221)-50112330</li> <li>• Email: <a href="mailto:occ@smartaviation.co.id">occ@smartaviation.co.id</a></li> <li>• SPIDERTRACK / Tracking Device</li> <li>• SMS or Cell Phone</li> </ul>

#### 3.3.3. Responsibilities

The Operation Control Center is responsible for the following decisions:

- Day to day monitoring of flight schedule and crew roster;
- Responsible monitoring flight duty day, flight hours, rest hours of crew member.
- Re-route due to airspace/airport Closed;
- Re-schedule or over-flight due to weather, airport limitation, civil disturbance, crew duty time limitations;
- Monitoring and tracking flight and all aircraft movement were equipped by SPIDERTRACK / tracking devices the monitored use live tracking.
- Monitoring of operation activities (flight following, Departure and Arrival of Movement Message, Passengers/Cargo/Mail carried and flight hours aircraft and crew).
- Request for Charter, Extra, Positioning or ferry flight.
- Responsible for reporting/controlling delays, diversion and cancellation and for follow up and action item, with coordination to technical and commercial department.
- Diversion for commercial and compassionate (Medevac) reasons
- Arrange the humanitarian or search & rescue mission (if required).
- Contingency Plans;

- I. In case SPIDERTRACK/tracking devices failure, Operation staff immediately report to Operation Control Center (OCC) for update flight following system by manual plotting on the en-route chart

### **3.3.4. Equipment Requirement at Operation control center**

1. Comfortably and secure office room.  
Has enough space to accommodate various equipment and flight follower personnel. Office equipment such as desks, chairs, papers, and document cabinet. Equipment use to keep and presenting all PT. Smart Cakrawala Aviation Operations Manuals, AIP, Emergency Response Manual and Minimum Equipment List, NOTAM's summaries.
2. In wall white board. Equipment use to presenting all latest up dated operational information and notices.
3. Desk computer or a laptop.  
Capable of receiving email send from base operational and store various softcopy of all retain flight document. Equipment capable of obtaining weather reports for all airports used as departure, destination or alternate or for emergencies including;
  - Meteorological Actual Reports (METAR's) for all of the above;
  - Terminal Area Forecasts (TAF's) for the area of operation and such wider areas as may require for proper weather trend analysis and; Weather radar summaries where available as part of the normal weather reporting system.
4. Internet connection.  
Equipment capable of obtaining weather reports and information from Badan Meteorologi Klimatologi dan Geofisika (BMKG) or a source approved by BMKG, pertaining to the flight including analysis and interpretation.
5. Fix telephone connection.  
Communications equipment including telephone and facsimile to ensure; Direct contact with PT. Smart Key Personnel, local Emergency department, security department, etc.
6. Fax, scanner, printer machines.  
Equipment use to reproduce operational document
7. VFR Route Chart.
8. Real time weather display

## **3.4. PREPARATION OF FLIGHT DOCUMENTS**

### **3.4.1. Weather Data**

At the beginning of each day, PT. Smart Cakrawala Aviation operation staff (authorized person) shall obtain current weather reports through the Meteorology Office in the airport or as applicable actual weather present condition reported by AFIS.

Weather updates may also be supplemented by observations reported from sites within the area of operation. These site observations will invariably be given by non-qualified personnel and may be somewhat unreliable. Observers should be asked to reference specific features such as communications tower with known heights for judging ceiling and visibility. Before operations commence, reported conditions must indicate that the ceiling and visibility can be reasonably expected to be equal to or better than outlined.

Once the aircraft is airborne, any change in conditions that could adversely affect the flight will be reported to the pilot. Conversely, should the pilot encounter weather below that required, he may either return to base or divert to a suitable safe landing area to await improved conditions.

Flight over localized weather conditions of ground fog, haze, smoke or combinations of these weather phenomena may only be made when the pilot has ascertained with certainty that a return to visual surface contact is possible in an emergency and that an approach and landing at destination can be accomplished.

### **3.4.2. Navigational Data**

Valid Navigational charts of required area, en-route, destination, and alternate shall be carried onboard the aircraft.

### **3.4.3. Operational Flight Plan (OFP)**

Planning of flight operations to be performed corresponds to the limitations of aircraft performance, limitations of available takeoff/landing sites, chosen flight route, available alternate (s), available fuel and scheduled payload. Refer to Operations Manual - Appendix.

### **3.4.4. NOTAMS**

Current Notice(s) to Airmen (NOTAM) pertinent to the en-route and aerodromes in the operations area.

### **3.4.5. ATC Flight Plan**

1. Prior to operating a flight, a flight plan for the entire flight shall be submitted to ATC. Changes to the (filed) flight plan shall be notified as soon as practicable.
2. In the event of a delay of 30 minutes or more in excess of the estimated off block time for a controlled flight, the flight plan should be amended or a new flight plan submitted with the cancellation of the old flight plan.



3. Individual flight plans must be submitted to ATC at least 30 minutes prior to departure, depending on local or regional regulations.
4. Notify ATC about early or delayed departure in excess of 30 minutes. Notification of flow control delays is not required.

The flight shall not be commenced until the PIC has satisfied himself that:

1. The aircraft is airworthy.
2. The instruments, equipment, and documents for the particular aircraft and type of operation to be undertaken are, on board and in good order.
3. The Aircraft Flight & Maintenance Log and the maintenance release certificate are completed and signed by engineer.
4. All available information appropriate to the intended operation, including all available current weather reports and forecast, indicate that the flight can be completed as planned.
5. The load to be carried is distributed and secured in accordance with pertinent instructions and safety regulations.
6. The flight can be conducted safely in accordance with the operating limitations as laid down in this manual and in the POH
7. The flight plan has been completed.

#### **3.4.6. Passenger and Cargo Manifest**

The Operation staff on duty shall give the Passenger/Cargo Manifest to the PIC for his approval and signature. One copy of manifest is kept to be onboard the aircraft.

## **3.5. FLIGHT DISPATCH**

### **3.5.1. Pilot Self Dispatch System (CASR 135.593)**

The PIC is required to report for duty in sufficient time to accomplish all pre-flight preparations no less than 60 minutes prior to scheduled departure time.

Under the pilot-self-dispatch system, the Operations Manager has delegated the authority and responsibilities for operational control, including preparation of the operational flight plan to the Pilot in Command. At Base Station Operation staff (authorized person) will be provided to assist the PIC for preparing weather data, NOTAM, filling in ATC Flight plan etc.

In the event of an emergency however, the Operations Manager or his delegate, shall be responsible for the appropriate actions and assistance in communications and dealing with that emergency. Refer to PT. Smart Cakrawala Aviation SQM (Safety And Quality Manual)

Flight Release Form is a form of checklist contains all data presented to the PIC during flight preparation. Refer to PT. Smart Cakrawala Aviation Operations Manual – Appendix.

Flight release form of a flight is valid when the PIC completes and signs the Operational Flight Plan after he has satisfied himself that the flight can be conducted safely.

Prior to completing the Operational Flight Plan; the PIC must receive the following pre-flight information:

- a. Maintenance Status – a review of the maintenance status of the aircraft consisting of at least all deferred defects, all maintenance action taken since last flight and any other relevant maintenance work being carried out. The line maintenance personnel will normally conduct this briefing.
- b. Weather and NOTAMS - weather and NOTAMS for all significant airports as appropriate, and en-route weather as required enabling the PIC to gain an operational picture of the weather conditions to be expected for the entire flight.
- c. Operational Information-a review must be made of the “Pilots to Read” Book and notice board to ensure that the most recent Notices are received and understood.

### **3.5.2. Dispatch Briefing and Preflight Briefing (CASR 135.609, 91.103)**

At Base Station the Operation staff will collect all data of the reported weather conditions, the forecast weather conditions (including adverse weather), and the status of communications, navigation, and airport facilities. The Operation staff will provide the PIC with data on each of these items if requested by Pilots.

All data may be delivered orally or in writing. In the latter case, communications facilities must be available for the Flight Operation staff and the PIC to communicate directly by voice if direct communication is required or desired.

The intent of this procedure is that the Operation staff and the PIC have adequate and identical information for flight planning. The PIC and the Flight Operation staff must be thoroughly familiar with, and consider all aspects of, the situation. For example, inoperative navigation aids and shortened runways as well as weather conditions can affect the safety of the flight. For this reason, the briefing by the Operation staff is not optional for either Operation staff or the PIC under these rules.

Before signing a flight release form ensure that the PIC has received the following information concerning the flight:

a. Airports and Facilities

The PIC may not begin a flight until the PIC has obtained all available reports on airport conditions and irregularities of navigation facilities that may affect the safety of the flight (AIP), and IFR / VFR Route chart). During the flight, the PIC must obtain any additional available information on airports and facilities that may affect the flight. A primary source of this information is the Aeronautical Information Publication (AIP) and INDOAVIS route chart.

The AIP contains information on airports and facilities needed by flight crew members and operational control personnel. Copies of the AIP are available at PT Smart Cakrawala Aviation Operational control center and Base Operational.

b. NOTAMs

Current NOTAMs for the routes and areas to be flown shall be read by PICs as part of their preflight planning. NOTAMs, both in electronic and printed form for domestic and international operations, in airspace covered by NOTAM Systems B are available at PT. Smart Cakrawala Aviation Operational. NOTAMs originally appear in electronic format and are later incorporated in a bi weekly NOTAM publication. Once incorporated in writing they are no longer transmitted electronically. NOTAM information is classified into the following three groups: NOTAM (D), NOTAM (L), and FDC NOTAMs.

c. Weather Information for Control of Flight Operations

Before beginning a flight, the Operation staff shall provide the pilot-in-command with all available weather reports and forecasts of weather phenomena that may affect The safety of flight, including adverse weather phenomena, such as clear air turbulence, thunderstorms, and low altitude wind shear, for each route to be flown and each airport to be used.

d. Load Control

The Operation staff will assist the PIC to ensure that a load sheet has been correctly prepared in accordance with CASR Parts 135.601.

e. Maintenance Status of Aircraft. (CASR 135.611)

PT. Smart Cakrawala Aviation will not dispatch or release an aero plane unless it is airworthy and all known defects have been rectified and appropriately certified by an aircraft maintenance engineer except where the dispatch of the aircraft is in accordance with an approved MEL.

**f. Crew Qualification and Crew Flight Time Limitations and Rest Requirements**

The qualifications and flight/duty time limitations of each crew member is considered when the crew member is scheduled by Chief Pilot. Flight duty/time information is stored electronically and can be checked quickly when making each day's flight and work schedules.

**g. Crew Medical Qualification during Temporary Medical Deficiency**

The CASRs and PT. Smart Cakrawala Aviation procedures preclude flight crew members from flight duty while they have a known medical or physical deficiency. While this relies on the ability of flight crew members to honestly determine their medical fitness, company policies support airmen who refuse to fly under conditions that would make them unable to pass a current medical examination. Flight crew members can be released from duty when they develop sudden temporary illnesses, such as colds, flu, or fevers without any fear of company reprisals.

These policies and procedures are meant to encourage flight crew members to take sick leave when they are ill. Due to the nature of area operation, PT. Smart Cakrawala Aviation also encourage flight crew members to take a good care of their own fitness when on duty.

### **3.5.3. Flight Monitoring**

Operation Control Center (OCC) must monitor the progress of each flight under his/her control. This monitoring is required until the flight has landed, or until is properly relieved. Flight monitoring, as a minimum, shall consist of the monitoring of each flight's fuel state, flight time remaining, destination and alternate airport weather trends, en route winds and weather (including pilot reports), and the status of airport and navigational facilities.

### **3.5.4. Dispatch Facilities (CASR 135.603.(2))**

PT. Smart Cakrawala Aviation will ensure that dispatch facilities and personnel shall be adequate for the proposed air transportation.

PT. Smart Cakrawala Aviation will ensure that dispatch facility and operations bases are provided with all the equipment, facilities and services necessary for the preparation and safe conduct of every flight. Specific equipment provided by the company in support of the OCC includes items described below:

#### **Specified Equipment to Support the OCC**

- a. Comfortably and secure office room. This office room can also be used for flight crew members waiting room.

- b. Office equipment such as desks, chairs, papers, and document cabinet. Equipment use to keep and presenting all PT. Smart Cakrawala Aviation Operations Manuals, AIP, VFR Route chart, Emergency Response Manual and Minimum Equipment List, NOTAM's summaries, retained flight document such as the Operational Flight Plan, Weight and Balance data, passenger or cargo manifests, etc. Equipment for the calculation of the Operational Flight Plan.
- c. Wall white board. Equipment use to presenting all latest up dated operational notices.
- d. Desk computer or a laptop. Equipment capable of obtaining weather reports for all airports used as departure, destination or alternate or for emergencies including;
  - Meteorological Actual Reports (METAR's) for all of the above;
  - Terminal Area Forecasts (TAF's) for the area of operation and such wider areas as may require for proper weather trend analysis and;
  - Weather radar summaries where available as part of the normal weather reporting system.
- e. Internet connection. Meteorological information from Badan Meteorologi Klimatologi dan Geofisika (BMKG) or a source approved by BMKG, pertaining to the flight including analysis and interpretation.
- f. VFR Route Chart.
- g. Ground to air two-way radio communication. Communications equipment to ensure;
  1. While aircraft in flight, direct communications between the Operation staff and PIC. This will normally be through the use of HF radio Communication through the ATC system is permitted if other services are unavailable.
  2. Quick and good exchange of all actual flight information.
  3. A direct communications capability between the Base Operational and the remote destination airport station regularly served. PT. Smart Cakrawala Aviation operational with Spidertracks Message.
  4. In case of failure of radio communication PT Smart Cakrawala Aviation use Spidertracks for two way communication.
- h. Flight following equipment applicable for PT. Smart Cakrawala Aviation is SPIDERTRACK Tracking Device system

### **3.5.5. Flight Release Form (CASR 135.601)**

The Operations Manager or his delegate must authorize all flights. The Flight Release Form of a flight is valid only when the PIC approves and accepts the Operational Flight Plan (OFP). The Pilot in Command shall signify his acceptance of the OFP by signing the Flight Release Form and forwarding it to the Operational Control. The Operation staff shall record all required information on the Flight Release Form. The Flight Release Form shall be retained as part of the Operational Flight Plan.

Prior to flight, the Pilot in Command may contact the Operation staff and receive a complete and thorough briefing consisting of all meteorological and operational information related to the flight. The pre-flight briefing shall include:

- Maintenance status of the aircraft consisting of deferred defects, MEL restrictions and procedures, and any special monitoring or reports requested by Maintenance.
- The airplane is airworthy, registered and Certificate of Airworthiness and Certificate of Register on board, (91.517)
- Weather and NOTAMs for all applicable airports and en-route weather sufficient to enable the PIC to gain an operational picture of the weather conditions to be expected for the entire flight including potential deviations required affecting the Operational Flight Plan
- The Operational Flight Plan brief overview, including anticipated loads and operational weight.
- Notification of recently issued operational memorandums
- Any other information deemed pertinent to the planned flight (s)

Where the above data and information is not available through the Operational Movement Control due to communications problems, the Pilot in Command may receive the weather and NOTAM's briefing through the ATC Briefing Office, and maintenance status of the aircraft can be determined through a briefing conducted by maintenance personnel at the departure base.

When technical difficulties prevent the production of the Operational Flight Plan through the Operational Movement Control, the PIC must ascertain that he has all applicable information required to safely conduct the flight and shall establish contact with the Operation staff at the earliest opportunity. These procedures reflect the failure of data or telecommunications systems of a temporary nature.

The Company shall not dispatch a flight unless;

- a. A flight release has been prepared and signed by a PIC
- b. All Flight Preparation Instructions have been complied with.
- c. An Operational Flight Plan has been prepared.
- d. An ATS Flight Plan, if required, has been prepared and submitted to the relevant Air Traffic Controlling station.

Where a Flight Release Form has been issued with respect to a flight, and not withdrawn prior to the take-off, the Pilot in Command has the final authority as to the departure, continuation, diversion or termination of that flight. Where a Flight Release Form has been issued with respect of a flight, it shall remain in force for the duration of the flight, from the originating point, to the final destination including en route stops, except where;

- a. The aircraft has been delayed or otherwise detained at the originating point, or any en route station stop for a period of more than 4 hours,

- b. Any flight crewmember has been changed from the original crew,
- c. Any member of the flight crew has exceeded his or her maximum flight duty time, necessitating an extension to such duty period,
- d. The aircraft has been involved in an incident or occurrence which may have altered the status of the maintenance release,
- e. Due to operational requirements the aircraft was forced to divert to an alternate or other airport, not included in the planned itinerary, or
- f. In the opinion of the PIC there has been a significant change in the operational weather, or other conditions upon which the flight release was issued, thereby rendering it invalid.

### **3.5.6. Flight Following and Flight Watch System (CASR 135.613)**

#### **3.5.6.1. General**

Flight Following are processed to:

- Ensure the proper monitoring of the progress of each flight with respect to its departure at the point of origin and arrival at its destination, including intermediate stops and diversion therefrom, and technical delays encountered at that point or stops.
- Ensure that the Pilot in Command is provided with all information necessary for the safety of the flight. PT. Smart Cakrawala Aviation shall comply with the requirements of a flight following system. In accordance with company policy, the major responsibility for operational control is with the Operations Manager.
- The Operations Manager may delegate the active control of the flight to other persons but always retains full responsibility.

#### **3.5.6.2. Flight Watch System**

Operation Control Centers can offer flight watch facilities to company aircraft.

PT. Smart Cakrawala Aviation conducts its flight following by;

- Using conventional two-way radio communication between PT. Smart Cakrawala Aviation aircraft and PT. Smart Cakrawala Aviation base operational or flight operational by spidertracks message or spidertext.
- During flight the PT. Smart Cakrawala Aviation aircraft must be able to maintain two-way radio communication with a Base Operational station. Base Operational station then send aircraft time information given by PIC to the Operation Control Centre in the Head Office using all means appropriate and necessary for quick message delivery. All means appropriate including cell phone, short message, or instant message.

#### Departure Message

After departure, the crew shall transmit a departure message consisting of the following information:

- Designated Call sign
- Route or Destination



- Cruise Altitude
- ETA and Time En-Route designated check point
- Endurance or fuel remain onboard

## Position Reporting

The PIC will transmit a position report to the controlling station at least once every 30 minutes or on arrival at a Compulsory Reporting Check Point. The position reports shall consist of:

1. Designated Call-sign
2. Name of Check Point
3. Time
4. Altitude
5. Estimated time at Destination and/or next designated Reporting Check Point as required.

### **3.5.7. Deviation from Planned Release**

The PIC is, during flight time, in command of the aircraft and crew and is responsible for the safety of the passengers, crew members, cargo, and airplane. The PIC has full control and authority in the operation of the aircraft, without limitation, over the other crew members and their duties during flight time.

In the event that a diversion from the planned flight occurs the PIC will, as soon as possible, notify the company by whatever means are available. The aircraft may not proceed from the intermediate airport without being followed by a Flight Follower.

### **3.5.8. Continuing Flight in Unsafe Conditions**

- a. No Pilot-in-Command may allow a flight to continue toward any airport to which it has been dispatched if, in the opinion of the Pilot-in-Command, the flight cannot be completed safely; unless, in the opinion of the Pilot-in-Command, there is no safer procedure.

In that event, continuation toward that airport is an emergency situation as set forth in CASR Part 135.559, respectively.

- b. If any instrument or item of equipment required under this part for the particular operation becomes inoperative enroute, the Pilot-in-Command shall comply with the approved procedures for such an occurrence as specified in the aircraft's minimum equipment list (MEL) or PT. Smart Cakrawala Aviation Company Maintenance Manual (CMM).
- c. Operation Manager becomes aware of any emergency situation that could pose a hazard to a flight in progress, they shall advise the pilot in command of such emergency, by the quickest means available, as mentioned at **OM Part A Chapter 3.14 Emergency Response Plan.**

## **3.6. NOTIFICATION OF MEL / DEFERRED MAINTENANCE ITEMS**

It is the responsibility of the Technical Department to advise PIC or Operation staff as soon as possible before a scheduled flight departure, of any known MEL items, missing, or unserviceable equipment that may affect the operation of the flight.

It is the responsibility of the PIC to determine what restrictions a MEL item will impose on the flight, based on current weather and runway conditions expected on the flight's planned route.

The Operation staff must ensure the MEL item is noted in the Flight Crew's pre-flight briefing. If the Pilot in Command refuses to accept the aircraft with the MEL item, the Operation staff will immediately advise the Operations Manager for further directions.

The Pilot in Command is responsible to ensure that the MEL items included in his/her pre-flight briefing with the operation staff have not changed. If any changes have occurred in the maintenance status of the aircraft, the Pilot in Command must notify the Operations Staff, as this change may require changes to the original flight plan.



### **3.7. INOPERABLE INSTRUMENTS AND EQUIPMENT (MEL)**

- a. No person may take off an airplane with inoperable instruments or equipment installed unless the following conditions are met:
  - (1) The approved Minimum Equipment List (MEL) provides for the operation of the airplane with the instruments and equipment in an inoperable condition.
  - (2) The flight crew has direct access prior to flight to all the information contained in the approved Minimum Equipment List. The MEL may be available through a printed or digital form, if approved by the DGCA.
  - (3) The airplane is operated under all applicable conditions and limitations contained in the Minimum Equipment List.
- b. The airplane may be operated with inoperable instruments or equipment not allowed by the MEL only with special flight permit granted by the DGCA. This approval may be granted for a one-time ferry flight to reposition the aircraft for maintenance.

## **3.8. AIRPORTS REQUIREMENTS (CASR 135.93)**

Refer to CASR 135.93, PT. Smart Cakrawala Aviation must show that there are sufficient adequately equipped airports along any proposed route.

An adequate airport is one which meets or exceeds the following considerations:

1. Runway length and surface.
2. Obstructions on the approach and departure end of runways must not adversely affect the safe operation of the aircraft being used, and appropriate hazard markings and lighting are serviceable and functioning when in use.
3. Facilities for the safe and proper movement of passengers to and from the aircraft.
4. Airport marking as appropriate.
5. Emergency and firefighting equipment and personnel as appropriate.

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## **3.9. CREW DOCUMENTS AND PERSONNEL EQUIPMENT (CASR 135.389)**

Before duty Flight crew shall ensures the following items are carried:

- a. Valid License.
- b. Valid Medical Certificate
- c. Valid Passport (for International Flight).
- d. Company Identification Card.
- e. Corrective glasses include spare for Pilot using corrective glasses.

## **3.10. COMPLETION OF FLIGHT**

Upon completion of flight paperwork, the Pilot in Command shall ensure that the appropriate documents are sent to OCC (Main Base). These documents shall include, but not limited to:

- a. Flight Release Form,
- b. Operational Flight Plans,
- c. Load Sheet,
- d. Aircraft Flight and Maintenance Logbook.
- e. Manifest (Pax and Cargo)
- f. Daily Flight Report.
- g. Pilot Trip Report (if any)
- h. Operational irregularity report (if any)

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## **3.11. RETENTION OF OPERATIONAL DOCUMENTS**

- a. At the departure point:
  - copy of the completed load manifest.
  - copy of the Flight Release Form.
  - copy of the Operational Flight Plan.
  
- b. At the destination point:
  - copy of the completed load manifest (pax and cargo)
  - copy of Flight Release Form,
  - copy of Operational Flight Plans,
  - copy of Load Sheet,
  - copy of Aircraft Flight and Maintenance Logbook.
  - copy of Daily Flight Report.
  - copy of Pilot Trip Report (if any)
  - copy of Operational irregularity report (if any)





## **3.12. COMPANY RECORDS-KEEPING (CASR 135.683, 685)**

PT. Smart Cakrawala Aviation shall keep at its main business office and make available for inspection by DGCA authorized inspectors the following:

- a. The Company Operating Certificate, Authorization Condition and Limitation (ACL) and Operations Specifications;
- b. A current list of the aircraft used or available for use in operations and the operations for which each is equipped; and
- c. An individual record of each pilot used by the Company for its operations including the following information:
  1. The full name of the pilot;
  2. The pilot's certificate, by type and number, and ratings that the pilot holds;
  3. The pilot's aeronautical experience in sufficient detail to determine the pilot's qualifications to pilot aircraft in company operations;
  4. The pilot's current duties and the date of the pilot's assignment to those duties;
  5. The effective date and class of the medical certificate that the pilot holds;
  6. The date and result of each of the initial and recurrent competency tests and proficiency and route checks required by this section, and the type of aircraft flown during that test or check;
  7. The pilot's flight time in sufficient detail to determine compliance with the flight time limitations of this section;
  8. The pilot's check pilot authorization, if any; and
  9. The date of the completion of the initial phase and each recurrent phase of the training required by this Manual.
  10. Record each action taken concerning the release from employment or physical or professional disqualification of any Pilot.
- d. The Company shall keep each record required paragraph (c) at least 24 months after it is made. The Company shall keep each record required by Paragraph until the pilot leaves the Company's employment or longer, as needed
- e. The pilot in command of an aircraft for which a load sheet must be prepared shall carry the original of the completed load sheet in the aircraft to its destination. The Company shall keep copies of completed load sheets for three months, or as long as required by specific contracts.

**Below are list of record keeping requirements:**

<b>INFORMATION USED FOR THE PREPARATION AND EXECUTION OF THE FLIGHT</b>	
Operational flight plan	3 months
Flight Release Form	3 months
Aircraft & Flight Maintenance log	24 month



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Route specific NOTAM/AIS briefing documentation if edited by the operator	3 months
Load Sheet documentation	3 months
Load Manifest (Pax and Cargo)	3 months
Reports	
Report(s) for recording details of any occurrence, or any event which the PIC deems necessary to report/record	24 months
FLIGHT CREW RECORDS (shall be keep until the Pilot leaves the PT. Smart Cakrawala Aviation employment or longer, as needed).	
Flight, Duty and Rest time	12 months
Licenses As long as the flight crew member is exercising the privileges of the license for PT. Smart Cakrawala Aviation	



### **3.13. NORMAL HOURS OF AIRCRAFT OPERATION**

VFR flight operations must be conducted during daylight hours only. "Daylight hours" for the purposes of this part means the time, as listed in approved air almanacs, from the hour of official sunrise to 30 minutes before official sunset. These times will be posted in flight operations offices.

Company supervisors shall have all Company aircraft on the ground at least 30 minutes before sunset. This allows time for search and rescue procedures to be initiated should any aircraft inbound to its base become overdue.

## **3.14. EMERGENCY RESPONSE PLAN**

Refer to CASR 135.559 Declaration and Action in an Emergency,

- a) In an emergency situation that requires immediate decision and action, the pilot in command may take any action that he considers necessary for the safety of the aircraft and passengers. In such a case he may deviate from prescribed operations procedures and methods, weather minimums, and the CASRs, to the extent required to avoid imminent danger or, in the interests of safety.
- b) Where the Flight Operations Officer or Director of Operations becomes aware of any emergency situation that could pose a hazard to a flight in progress, they shall advise the pilot in command of such emergency, by the quickest means available. Furthermore, they shall;
  - (1) remain available to the PIC of that flight on a continuous basis until;
    - (i) the threat of such emergency has passed,
    - (ii) they have ascertained the decision of the pilot in command, acknowledged that decision, and determined they assistance is no longer required, or
    - (iii) have handed off the flight to another competent person who is in a better position to be of assistance.
  - (2) relay required messages through third parties as necessary to communicate with the flight.
  - (3) declare an emergency and follow missing aircraft procedures as appropriate.
- c) Whenever a pilot in command or Flight Operations Officer or Director of Operations exercises emergency authority, he shall declare an emergency and keep the appropriate ATC facility and dispatch centers fully informed of the progress of the flight. The person declaring the emergency shall send a written report of any deviation to the operator's operations manager and the Director. Where a Flight Operations Officer or Director of Operations declared the emergency, they shall send a report within 10 days after the date of the emergency, and a pilot in command shall send his report within 10 days after returning to his home base.



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## **3.15. SEARCH AND RESCUE SERVICES**

Prior to flights over remote areas the PIC shall ensure that he/she has information on the search and rescue services available or that such information is available in the area over which the aircraft will be flown.

### 4. CREW COMPOSITION PT. SMART CAKRAWALA AVIATION

#### 4.1. CREW

##### 4.1.1. Minimum Flight Crew (CASR Section 135.383)

The basic flight crew complement is the minimum number of flight crew required to handle the aircraft controls during flight.

The following are minimum crew composition of aircrafts operated by Smart Cakrawala Aviation :

Aircraft Type	Type of Operations	Minimum Flight Crew
C208/C208B	Passenger operation	2 Pilot
	Cargo operation	2 Pilot
	Aerial Survey	2 Pilot
Robinson R66	Passenger operation	1 Pilot
	Aerial Survey	1 Pilot
EC-130 T2	Passenger operation	1 Pilot
	Aerial Survey	1 Pilot
Pilatus PC-6 B2/H4	Passenger operation	1 Pilot
	Cargo operation	1 Pilot
	Aerial Survey	1 Pilot

The two pilots for C208/C208B are one pilot designated as Pilot in Command, the other as Second in Command.

Except in Papua area, PT. Smart Cakrawala Aviation may assign single pilot for C208/C208B only for non-commercial flight (Ferry Flight).

The name (s) of each pilot assigned to a flight, and their position, will be shown on the Flight Release for each flight the pilot shall:

- Holds an appropriate current airman certificate issued by the DGCA;
- Has any required appropriate current airman and medical certificates in his possession while engaged in operations; and
- Is otherwise qualified for the operation for which he is to be used.

Smart Cakrawala Aviation will not assign a person to act and no person shall act as the pilot in command of a single pilot aircraft engaged in any air transportation service, if that person has reached his or her 60th birthday. Smart Cakrawala Aviation will not assign a person to act and no person shall act as the Pilot in Command on any aircraft engaged in any air transport service if that person has reached his / her 65th birthday.

Airmen, who have reached their 65<sup>th</sup> birthday, may not function as flight instructors (airplane), nor may they serve as pilot flight crew members under CASR 135.

##### 4.1.2. Designation of Pilot-In-Command

Irrespective of the number of crew carried, the PT. Smart helicopter and single engine aircraft he/she has acquired not less than 20 hours of operating experience on the specific make and basic model of aircraft.

Such operating Smart Cakrawala Aviation Operations Department will nominate one of the pilots to be the aircraft PIC for a particular flight or series of flights. This is usually achieved taking into account the seniority of the flight crews concerned. Co-pilot will be designated Second-In-Command (if any).



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For experience must be acquired while occupying the pilot-in command position under the supervision of a pilot qualified to give flight instruction on that type of aircraft.

The duty as PIC will be relief when:

- A flight or series of flight of the day in his/her command is completed.
- A flight or series of flight of the day in his/her command is terminated or cancelled for any particular of reason (exp. weather, aircraft serviceability, economical reason, crew health).
- PIC Flight Duty Time has reached maximum.

### **The Captain**

- a. Maintains overall responsibility for the flight's execution;
- b. Is the representative of the company when dealing with other crew members during flight duty-time and out-stations;
- c. Promotes an atmosphere under which optimum crew co-operation may be expected
- d. Is responsible for flight preparation and execution in compliance with legal and company regulations;
- e. Should have no doubts about his condition and proficiency when reporting for duty.

### **4.1.3. Procedure to Avoid Mixing Inexperienced Flight Crew**

A PIC with less than 1-year experience in command shall not fly with a Co-pilot with less than 1-year experience unless specifically cleared by the Chief Pilot a crew member is considered to be inexperienced until either:

- a. He has achieved 250 flight hours on the type and/or in the role within a period of the last 1 year; or

He has achieved 250 flight hours on the type and/or in the role (no time limit), unless specifically cleared by the Chief Pilot or Deputy Chief Pilot.

## **4.2. SUCCESSION OF COMMAND & ASSUMPTION OF CONTROL**

### **4.2.1. Procedures**

In the event a situation is encountered during flight, where the PIC is no longer able to perform his/her duties as PIC, the control and command of the aircraft shall be relinquished to:

- 1.** Another Captain qualified on the type; or
- 2.** To the assigned Second-In-Command of the flight (if any).

Where any succession of command has occurred with the result that the flight crew(s) operating the aircraft no longer meet the qualification requirements of the regulations, the remaining flight crew shall as soon as practicable:

- a.** Notify ATC of the operating irregularity and request appropriate assistance; and
- b.** Within seventy-two (72) hours after the arrival of such flight, submit a full written report to the DGCA.

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## **4.3. SECOND IN COMMAND HANDLING THE AIRCRAFT**

Second in command complete their training and periodic competency checks from the right pilot's seat. Unless flying with a Company Training Captain qualified to instruct on the type being flown when he may occupy either the left or right pilot's seat, a First Officer should occupy the right-hand seat from which he may carry out the duties of PF or PM as required.

## 5. REQUIREMENTS AND QUALIFICATION OF FLIGHT CREW.

### 5.1. DESCRIPTION OF REQUIREMENTS (CASR 135.389)

#### 5.1.1. Introduction

Smart Cakrawala Aviation aircraft will not be dispatched for flight unless the flight crew members meet the licensing, training and proficiency requirements as specified in CASR 61, CASR 91, and CASR 135, and this Operations Manual.

Smart Cakrawala Aviation personnel are not allowed to accept any task if their license and/or certificate of competency for the particular type of operation, route or aircraft has expired.

Additionally, Smart Cakrawala Aviation holds its flight crew to the highest standards with safety of flight the highest priority.

The Pilot in Command is responsible for all factors affecting the safety of that flight. He may, at his discretion, elect to limit loads, delay flights, or alter schedules due to weather conditions, wind and temperature variations, pilot fatigue, etc. Individual pilots may, and at times should, vary their assessment of similar situations.

The information contained in this section is the minimum standard that must be met at times a higher standard may be used in the interest of safety.

#### 5.1.2. Maintaining the Validity of License

It is the responsibility of the individual aircrew member to ensure that he is in possession of a valid and properly rated license including radiotelephony license, appropriate to his function. He must ensure all necessary action is taken towards the renewal of his license.

Details of the required licenses, rating (s), qualification/competency, experience, training, checking and regency for operations personnel to conduct their duties are provided in Operation Manual Part D.

A license holder shall not exercise the privileges granted by any license or rating unless the holder maintains competency by meeting the relevant requirements.

The validity of the license is determined by the validity of the ratings therein and the medical certificate.

#### 5.1.3. Flight Crew Training and Checking Requirement

NO	TRAINING/CHECK	PIC	SIC	Turboprop MTOW less than 12500 lbs
1	Company Indoctrination (1)	X	X	1 Time
2	Pilot Proficiency Check (2)	X	X	PIC-12 Months
3	Aircraft Type Recurrent (1)	X	X	12 Months
4	Dangerous Goods Awareness (1)	X	X	12 Months
5	Crew Resource Management (1)	X	X	12 Months
6	Windshear (1)	X	X	12 Months
7	Aviation Security (1)	X	X	12 Months
8	Crew Member Emergency Training (1)	X	X	24 Months
9	Safety Management System (1)	X	X	1 Time

**NOTE:**

1. Class Room
2. Aircraft

#### **5.1.4. Personnel Folder Retention**

Personnel record of individual aircrew member will have maintained for last 24 months on appropriate folder including of summary.

#### **5.1.5. Medical Requirements for Pilot (CASR 67)**

Refer to CASR Part 67, and CASR 135. 537 each Pilot must able to prove their physical fitness by medical examination:

- Every 6 (six) months for Pilot.

At Flops, company will provide to the on duty Pilots and Engineers examination for blood pressure and alcohol contamination for each first flight of the day.

#### **5.1.6. Responsibility for Medical Certificate Reexaminations**

Re-examination and re-validation of a Pilot medical certificate is the responsibility of each crewmember.

Failure to undergo a medical examination on or before the expiration date of a crewmember's current medical certificate will result in suspension from flight duties until the crewmember is re-examined and the certificate revalidated.

#### **5.1.7. Confidentiality of Medical Examination Information**

The Company shall treat all information regarding pilot medical examination as confidential document. However, in the interest of safety, or for the immediate medical attention of an individual flight crewmember, the Medical Officer may release the information with specific recommendations to the Operation Manager.

#### **5.1.8. New Hire Flight Crew Recruitment**

The new hire flight crew with previous experience with turbo prop engine, turbo shaft and/or jet engine must undergo and pass the following process prior to joining the company:

- a. See requirement CASR 61.
- b. Flight Operations Management interview and Human Resources interview.
- c. Security background check.
- d. Sufficient English fluency, with minimum Operational Level (Level 4).
- e. Medical fitness and psychoactive substances test.
- f. Interpersonal skills.
- g. Recruitment requirements are detailed in the Smart Cakrawala Aviation recruitment SOP.

## **5.2. CREW QUALIFICATION REQUIREMENTS**

Pilot-In-Command for shall have been trained and shall have demonstrated his competence to handle the aircraft in all maneuvers associated with a flight of this type.

### **5.2.1. Company Check Pilot (CCP)**

All operations and technical functions of the CCP are under the jurisdiction of Chief Pilot. CCP is therefore responsible to, shall report directly to, and shall carry out all check pilot duties through, Chief Pilot. ACCP must constantly be aware that they perform their duties as delegates of the DGCA and are responsible for:

1. Acquiring and maintaining a working knowledge of those sections of the Handbook for the Guidance of Government Check Pilots pertaining to the testing and checking of flight crew personnel as applicable.
2. Carrying out on behalf of the DGCA and subject to his/her authority, those checks required pursuant to the CASR and in accordance with the Operations Manual Part D (Training).
3. Ensuring that the Line Check Report is completed and submitted to the Chief Pilot for placement in the Pilot's file and any necessary action arising from the assessment of the Line Check
4. Ensuring that the Pilot Proficiency Check report is completed and submitted to the Chief Pilot, regardless of whether the assessment is Satisfactory or Unsatisfactory. All CCP are deemed to be in a 'perceived conflict of interest in that they are simultaneously employees of the Company and delegates of the DGCA when performing checking duties

To avoid a real conflict of interest, it is imperative that CCP's strictly adhere to the policy and guidelines in the Operations Manual Part D (Training).

#### **CCP Authority will expire if:**

- 1) The CCP's employment with PT. Smart Cakrawala Aviation terminates.
- 2) The CCP's Instrument Rating and or Proficiency Check on the aircraft type authorized expire.

#### **Qualification Required:**

1. Meets all the requirements of Section 5.1.2 below,
2. Has received CCP specific training in at least the following subjects;
  - a. CCP duties and responsibilities and the reporting relationship between a CCP, the chief pilot and the Director,
  - b. Applicable Civil Aviation Safety Regulations, PT. Smart Cakrawala Aviation Operation Specifications, and all relevant procedures manuals,
  - c. The appropriate methods, procedures, and techniques for conducting the proficiency checks, including flight test protocol,
  - d. Proper evaluation of pilot performance including the detection of:
    - (A) Improper and insufficient training; and

- (B) Personal characteristics that could adversely affect safety,
  - e. The appropriate action in the case of an unsatisfactory assessment, and
  - f. The approved methods, procedures, and limitations for performing the required normal, abnormal, and emergency maneuvers in the aircraft.
3. Is the holder of a delegation of authority issued by the Director which authorizes;
    - a. The type of check to be performed, and
    - b. The type of aircraft to be performed in
  4. Has within the preceding 12 months, completed at least one proficiency check, while being monitored by a DGCA inspector.
  5. He must be familiar with the appropriate routes operated by Company. In order to maintain check pilot status, the pilot must have demonstrated within the previous 6 (six) months his/her ability to perform the required duties to the satisfaction of the DGCA or Chief Pilot

### **5.2.2. Flight Instructor (FI)**

Flight Instructor are responsible to Chief Pilot for:

1. Monitoring the operation and identifying problems, which may require the provision of extra training or changes in operational procedures.
2. Together with Chief Pilot, the establishment and promulgation of the standards and piloting techniques with which flight crew will be expected to comply during flight operations and which the flight crew will be required to demonstrate during initial and recurrent checks flight crew in accordance with the approved training program.
3. Conducting ground, synthetic flight training device and flight training of all flight crew in accordance with the approved training program.
4. Supervision of the standards and recommending amendments to their respected POH/RFM and SOP
5. Liaison with crew scheduling concerning training details.
6. Any other duties assigned by Chief Pilot.

#### **Qualification required:**

There shall be Instructor Pilots designated for each type of aircraft operated by Company. Instructor Pilots must be holders of current Airline Transport Pilot License with or a Commercial Pilot License, with appropriate ratings of the aircraft utilized by PT. Smart Cakrawala Aviation.

In order to maintain instructor status, the pilot must have demonstrated within the previous 6 (six) months his/her ability to perform the required duties to the satisfaction of Chief Pilot.

### **5.2.3. Pilot-In-Command (PIC) or Captain.**

#### **5.2.3.1. Pilot-In-Command (PIC) or Captain Pilot Requirement**

The minimum qualification requirements for pilots to act as PIC of a commercial air transportation flight in Smart Cakrawala Aviation are:



NO	QUALIFICATION	LICENSES	MINIMUM HOURS REQUIREMENTS		
			FIXED WING		HELICOPTERS
			FO UPGRADING TO PIC	DIRECT ENTRY PIC	
1	TOTAL HOURS	CPL/OR ATPL	1000 Hours	1000 Hours	500 Hours
2	TOTAL ON TYPE		500 Hours	100 Hours	20 Hours
3	TOTAL HOURS IN COMMAND		200 Hours*	250 Hours	100 Hours
4	TOTAL SINGLE ENGINE HOURS		1000 Hours	1000 Hours	-
5	TOTAL HOURS MOUNTAINOUS AREA		Refer to SOP Mountainous Manual	Refer to SOP Mountainous Manual	Refer to SOP Mountainous Manual

### REMARKS:

\*May be reduced to 100 Hours if candidate has 500 Hours on type as SIC.

#### 5.2.3.2. Period of Command

PIC command begins immediately he/she enters the aircraft with intention of carrying out flight, or when he/she first signs the aircraft papers and continues until either:

- 1) Another PIC has assumed command of the aircraft, or
- 2) The aircraft has handed over to the appropriate official in charge, or Station Manager, on completion of the command period.

#### 5.2.3.3. Responsibility of Command

One pilot will always be designated as PIC before each flight. When a crew consists of two qualified captains, one will be designated as PIC. PIC shall be in command of the aircraft at all times and shall be responsible for the safety of persons and goods carried, and for the conduct and safety of the flight crew. Should PIC become incapacitated during flight, Second-In-Command shall then assume command (if any).

#### Pilot-In-Command shall ensure that before flight:

- a) He/she familiarizes him/herself and his/her crew thoroughly on the basis of the latest available information with.
- b) The planned mission.
- c) The airport planned for use.
- d) The reported and forecast meteorological conditions for the route.
- e) The navigation and radio aids to be used.
- f) Alternate flight plans to be followed in case of the original destination flight plan becoming impractical owing to unforeseen circumstances.
- g) The flight as planned can be made safely and in accordance with Civil Aviation.
- h) The instrument and equipment required for the flight are installed.

- i) The maps, charts and navigation equipment required for the flights are readily available on the aircraft.

- j) The aircraft is airworthy, any outstanding MEL items are thoroughly understood and complied with, and that the aircraft has been released by Engineer.
- k) The load carried is so distributed and secured that the aircraft is safe for flight.
- l) The "Pre-Flight Check" has been correctly carried out.
- m) A flashlight having at least two size "D" cells, or the equivalent, that is in good working order (91.531)
- n) All doors are closed and secured.

**Pilot-In-Command shall ensure that during flight:**

- 1. The checklist devised for use in the various phases of flight is carried out.
- 2. The relevant instructions and limitations laid down in this manual, the Rotorcraft Flight Manual (RFM) or Pilots Operating Handbook (POH), the MEL, and the Certificate of Airworthiness for the operation of the aircraft are observed.
- 3. Communication with controlling agencies and System Operational Control is maintained as required.
- 4. Wherever possible, the Second-In-Command (SIC) is granted a sufficient number of takeoffs and landings to assist him/her in maintaining competency (if any).

**Pilot-in-Command shall ensure after the flight that:**

- a. The flight plan or flight note is closed as applicable.
- b. All known or suspected defects of the aircraft that have come to his/her knowledge during the course of the flight are entered in the Aircraft Flight Maintenance Log.
- c. The Aircraft Flight Maintenance Log book is brought up-to-date.
- d. Any special reports (Trip Report) such as the Operational Irregularity Report or any other report required by the Company are completed and submitted to Chief Pilot.

Aircraft observations is made or as soon thereafter is practicable. The condition encountered or observed to be reported are as follows:

- (1) moderate or severe turbulence; or
- (2) moderate or severe icing; or
- (3) severe mountain wave; or
- (4) thunderstorm, without hail, that are obscured, embedded, widespread or in squall lines; or
- (5) thunderstorm, with hail, that are obscured, embedded, widespread or in squall lines; or
- (6) heavy dust storm or heavy sandstorm; or
- (7) volcanic ash cloud; or
- (8) pre-eruption volcanic activity or a volcanic eruption; or
- (9) dense smoke resulting from forest fire; or
- (10) wind shear; or
- (11) metrological conditions likely to affect the safety of other aircraft.

- e. The pilot in command shall report the runway braking action as special air-report (AIREP) when the runway braking action encountered is not as good as report.

## 5.2.3.4. Recency

Any pilot who has not completed 3 takeoffs and landings within the previous 90 days shall regain competency by undergoing the following recency of experience training:

- a. A minimum of 3 take-offs and landings as PF in the preceding 90 days which is not carrying passengers. These may be carried out in the aircraft or an approved flight simulator of the type to be used.
- b. After an absence of more than 90 days from flying duties or operation of a specific type or variant, pilots must undergo flying and technical refresher training, specified in the Operations Training Manual, before again operating on a commercial flight in the capacity for which they were certified. The exact training requirements may be dependent on length of absence, and will be specified by the Chief Pilot.
- c. The 90-day period prescribed above may be extended up to a maximum of 120 days provided a suitable initial period of line flying is conducted under the supervision of a nominated commander.

## 5.2.4. Second-In-Command (SIC) or First Officer.

The minimum qualification requirements for pilots to act as SIC of a commercial air transportation flight in Smart Cakrawala Aviation are:

NO	QUALIFICATION	LICENSES	MINIMUM HOURS REQUIREMENTS	
			FIXED WING	HELICOPTERS
1	TOTAL HOURS	CPL /CPL(H)	160	N/A
2	TOTAL ON TYPE		20	
3	TOTAL HOURS IN COMMAND		20	

### REMARK:

1. Minimum 20 Hours Line Training & Release Instructor or Check Pilot
2. The Company shall not use any person, nor may any person serve, as second in command of an aircraft unless that person holds at least a Commercial Pilot License with type rating.
3. For mountainous please see SOP mountainous Manual.

## **5.3. FOREIGN PILOTS**

The policy of hiring foreign pilots and their required qualifications are decided by Management. Normally, foreign pilots will be experienced captains. Foreign pilots being considered for employment must first comply with the laws applicable to all foreigners working in Indonesia and shall have the following permits and certificates:

1. Temporary Admission Permit or KIMS (Kartu Izin Menetap Sementara);
2. Work Permit for Foreigners (Izin Kerja Tenga Asing);
3. Personal Security Clearance.
4. Alien Registration (Pendaftaran & Mutasi Orang Asing);
5. Certificate of Police Registration (Surat Tanda Melaporkan Diri); and
6. Local Area Police Permit (Surat Keterangan Jalan).

Pilot licenses of foreign pilots must be endorsed by the DGCA. This endorsement usually requires that foreign pilots successfully pass a written test and flight check administered by the DGCA.

Arrangements to obtain the necessary permits and flying documents will be made by the Operations Manager.

Chief Pilot and the pilots themselves must ensure that these documents remain current.

Each foreign pilot employed by the Company shall, both on and off duty, conduct himself in such a manner that does not offend the customs and sensibilities of Indonesia around whom the foreign pilot works.

## **5.4. HELICOPTER LANDING OFFICER (HLO)**

New Hire Helicopter Landing Officer (HLO)

Smart Cakrawala Aviation HLO must meet the requirement as follows:

1. Not less than 18 years old / maximum 65 years old
2. Have, as a minimum, one year of experience as an assistant in the operational control of air transport flights, or
3. Have satisfactory completed a formal training course as a Helicopter Landing Officer,
4. Capable of speaking and reading in a language that will permit communication with other areas within the organization relevant to operational control.
5. Have demonstrated the ability to analyze weather, create accurate helicopter performance and provide assistance to flights.
6. Complete an observation flight.
7. Holds a valid and current Helicopter Landing Officer license.

## **5.5. FLIGHT OPERATION OFFICER (FOO)**

Qualifications required:

1. Hold Flight Operation Officer License.
2. Knows the contents of the Smart Cakrawala Aviation Operations Manual, flight dispatch procedures, and provisions of this part necessary to the proper performance of his/her duties.

Smart Cakrawala Aviation FOO must meet the requirement as follows:

- a. Not less than 21 years old and either:
  - Have, as a minimum, one year of experience as an assistant in the operational control of air transport flights, or
  - Have satisfactory completed a formal training course as a flight operations officer, or
  - Have, as a minimum, a total of two years' service in any one or combination of the following:
    - Flight crewmember in air transport operations
    - Meteorologist in an organization dispatching aircraft.
    - Air traffic controller
    - Technical supervisor of FOO personnel
    - Technical supervisor of air transport systems.
- b. Meet knowledge, experience, skill and training requirements stated by DGCA.
- c. Have 3<sup>rd</sup> class Medical Examination issued by DGCA.
- d. Have demonstrated the ability to analyze weather, create accurate flight plans and provide assistance to flights.
- e. Complete an observation flight.
- f. Capable of speaking and reading in a language that will permit communication with other areas within the organization relevant to operational control.
- g. Holds a valid and current Flight Operation Officers license.



## **5.6. OPERATION MULTI TYPE WITHIN ONE CLASS RATING**

PT Smart Cakrawala Aviation has policy for Pilot to operate more than 1 (one) class rating especially to operate C208/C208B and PC-6/B2-H4.

Requirements :

1. 1 hari tidak bisa multi type (hanya 1 type)
2. Harus review technical req pesawat
3. Pengoperasi kondisi khusus :
  - a. Tidak ada pilot pengganti yang available
  - b. Ferry flight

## **6. FLIGHT TIME AND FLIGHT DUTY TIME LIMITATIONS (CASR 135. 497)**

### **6.1. GENERAL**

Company Flight Crew Duty Regulations are formulated in compliance with current CASR Part 135. However, in case of daily irregularities enroute, PIC may decide to exceed the Flight Time limitation given here under in order to execute a planned operation with due consideration to the possible stress placed upon his/her crew. A corresponding trip report is required.

The flight crew and operations staff Duty Regulations set forth limitations, which are of social and medical nature and provide reasonable flight crew utilization within the provision of company policy on flight safety.

To minimize the possibility of exceeding the limitations, it is compulsory to have 1 (one) hour margin on Flight Duty Time, for scheduling any Flight Crew, and 45 minutes margin on Flight Time for Flight Crew scheduling.

Time spent in transportation to/from the airport has NOT been included and is NOT part of a Rest Period. The standard transportation time is 1 (one) hour.

If special circumstances call for flight requirements deviating from the normal company routine operations, the specific approval should be obtained from Operation Manager whom in consultation with the respective experts may establish a temporary regulation, which differ from the existing regulation.

## 6.2. LIMITATIONS OF FLIGHT AND DUTY TIME

### 6.2.1. Definition

**"Crewmember"** - mean pilots.

**"Duty Period"** - means that any continuous period during which a crewmember is required to carry out any task associated with the business of an aircraft operator including any period spent completing post flight duties. Duty periods particularly affect crewmembers required to carry out administrative, managerial or executive roles in addition to flying duties.

**"Flight Time"** - means the time between first moving of the rotors with the intention of taking off, and coming to rest after a flight. In the case of multiple sectors, this will include time spent with rotors running between landing and next take-off.

**"Rest period"** - means a period of time during which a pilot is released from all official duty or contact by the Company. This period must exclude all time spent commuting by the most direct route, between the companies designated rest facility and assigned duty station and, a specified period of prone rest with at least one additional hour provided for physiological needs.

**"Crew Rest Period"** - The period of time during which a crewmember is released from all official duty or contact by the company. This period must exclude all time spent commuting by the most direct route, between the companies designated rest facility and assigned duty station and, a specified period of prone rest with at least one additional hour provided for physiological needs. Company shall provide a crew rest;

- a) That allows for not less than 8 hours of rest
- b) That meets all the requirements as defined of 'Rest Period' above.

**"Flight Duty Time"** - means the total elapse period from the time the crew member is required to report for duty, to the time that crew member has completed all official duties with respect to a flight or series of flights and is released for an official crew rest.

- a) A 45-minute for flight planning and preflight before take-off,
- b) All logged flight time, and
- c) A 15-minute post flight period after the completion of the flight.

**"Required Days Off"** - means the period time consisting of 24 consecutive hours during which time a crewmember is free from all duties or contact by the company. A required day off is provided at the person's residence or the place or at a location where he is stationed. Where the Company provides more than the minimum one-day off in any 7 consecutive day period, the requirement to provide such day off at the person's residence does not apply.

**Standby Duty Period** - A period of time during which a flight crew member is not scheduled for a flight and is not required to be present at the airport but must make himself available to receive any instruction to undertake an air transport flight.

**"Time periods" :**

- Day - 24 consecutive hours
- Week - 7 consecutive days
- Month – 30 consecutive days
- Year - 52 consecutive weeks or 1 calendar year.

### 6.2.2. Flight Crew – Flight Time and Duty Time PT. Smart Cakrawala Aviation

The Company shall not assign a person to act as a flight crewmember and no person shall accept such assignment if that flight crewmember's total flight time in all flights conducted by him or her will exceed the following:

Minimum Flight Crew	Additional Flight Crew	Maximum Flight and Duty times		Subject to Subsections/Remarks		
		Duty	Flight	(a)	(b)	(c)
One	Nil	12 Hrs	6 Hrs	No	No	No
Two	Nil	12 Hrs	9 Hrs	No	No	No
One	Nil	12 Hrs	6 Hrs	Helicopter		
Two	Nil	12 Hrs	7 Hrs	Helicopter		
One/Two	Nil	12 Hrs	5 Hrs	Helicopter engaged in external load or multi-landing operations.		

### Maximum Flight Time

The Company shall not assign a person to act as a flight crew and NO person shall accept such assignment if that flight crew total flight time in all flights conducted by him/her will exceed and the increased flight time limitations are not more than an additional 25 percent of the maximums the following:

MTOW	DAILY	7 DAYS	30 DAYS	90 DAYS	365 DAYS
> 12,500LBS	SEE FLIGHT & DUTY TIME	35	100	300	1050
<12,500LBS		40	100	300	1050

## **6.3. DUTY FREE**

Duty free is a period of time at flight crew's home base where he/she shall be free of any duty from the company. Duty free serve the dual purpose of recovering from duty and to take care of the aspect of family and social life.



## **6.4. DAY AVAILABLE**

Day available means a day without a specific assignment, but eligible for a revision of schedule. If there is NO revision received until 00:00 local time on the previous day, the status of this schedule becomes a Duty Free.

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## **6.5. STANDBY DUTY PERIOD**

The length of a Standby Duty Period which precedes or follows a Flying Duty Period shall be reckoned as part of the Flying Duty Period for accounting purposes unless the period of standby is carried out at a place other than an aerodrome, where adequate rest facilities are provided, in which case the duration of the Standby Duty Period will be considered as a Rest Period.

### 6.6. MINIMUM REST PERIOD

Minimum Rest Period is a period of time, in which the flight crew is free from all duties and may NOT accept assignment by the company.

Minimum Rest Period is calculated from the end of previous flight duty time until the beginning of the next flight duty time, which is at least 9 hours. Time spent in transportation from/to airport is NOT included.

Every flight crew shall be relieved from all duties for at least 24 consecutive hours during 6 consecutive days.

For multi-days flight duty assignment, the Minimum Rest Period at crew's home base is equal to 2/5 times the total hours away from home (start from the beginning of flight duty time on the first day until the end of flight duty time on the last day).

Every flight crew after attending Ground Training or other courses, the duty free day(s)

is based on the table below:

Duration of training/course in days	1 – 6	7 – 13	14 – 20	21 – 27	≥ 27
Duty Free day(s)	1	2	3	4	5



## **7. CREW HEALTH**

### **7.1. CREW HEALTH PRECAUTIONS**

#### **7.1.1. General**

Crew health is of the highest importance and has a direct impact upon flight safety. This is reflected in very stringent requirements for regular medical examinations and medical certificates. It hardly needs to be mentioned that living health consciously is in the self-interest of every Flight crew.

A Flight crew shall not perform duties on an airplane if he is in any doubt of being able to accomplish his assigned duties, or if he knows or suspects that he is suffering from fatigue or feels unfit to the extent that the flight may be endangered.

Any Flight crew shall not commence a flight duty or continue a flight duty after an intermediate landing if he is aware that he is too fatigued or will be too fatigued before next landing.

The basic responsibility in fatigue management rests with the individual Flight crew who should report for duty in a reasonably rested state and in a fit state to perform his expected duty. This includes attention to such factors as sleep, personal fitness and health, life style and activities prior to flight. Due allowance for any adverse effects of these factors should be taken into account to ensure that fatigue which would significantly affect operating performance is not encountered during flight duties.

If any of the flight crew is suspected to be under the influence of any psychoactive prior to flight, the other flight crew shall immediately inform flight operations directorate and ensure the required actions are taken.

#### **7.1.2. Alcohol (CASR 91.17)**

Use of alcohol in the workplace can endanger not only the individual user but also colleagues, clients and members of the public. Although alcohol consumption may be socially acceptable, it has a detrimental effect on human skills and efficiency which is particularly noted in relation to flying duties. The effects of alcohol are primarily related to levels in the blood which vary individually according to the quantity and rate of consumption and may be significant long after the last alcoholic intake.

Flight crews SHALL NOT :

1. Consume alcohol for a minimum period of 8 hours before standby or reporting for duty.
2. Consume alcohol while on standby or during the flight duty period.

3. Commence a flight duty time with a blood alcohol level in excess of 0.04. mg per ml (milligrams per milliliters), or 60 micrograms alcohol per liter exhaled breath.
4. Use excessive amounts of alcoholic beverages during the 24 hour period prior to reporting for duty.
5. Consume alcoholic beverages whilst in PT. Smart Cakrawala Aviation uniform. It is also prohibited for uniformed employees to visit any establishment whose primary purpose it is to sell, dispense or serve alcoholic beverages.

### **7.1.3. Blood Donation**

Crew members should not normally act as blood donors. If, for any reason, they have done so, they are to advise the Company immediately following each donation, and shall not undertake flying duties for at least 24 hours after they have given blood.

### **7.1.4. Company Policy on Testing For Abuse of Drugs & Alcohol**

It is PT. Smart Cakrawala Aviation policy that all licensed staff are periodically tested for abuse of drugs and alcohol. And Certificate holders shall examine medical condition for each pilot, flight engineer and engineer before performing their duties for operational of the aircraft in accordance with the current provision of the CASR.135.537 (a)

These tests are administered by selected medical facilities. The tests are to be carried out on a random basis without prior notification to staff and will occur at least once and at most twice each year for each person liable to be tested. Additionally, further tests may be carried out on licensed staff following any accident or incident in which they are involved. Test results will be medically confidential. The Company will only be informed if a person subject to the test, tests positive for either drugs or alcohol. In the event of a positive test result, the employee will be immediately suspended from duty and will complete a medical examination and further tests. In the event that a second positive test results from this examination, employment will be terminated.

### **7.1.5. Psychoactive substance, Narcotics and/or Drugs**

The use of narcotics and/or drugs which have not been prescribed by a medical practitioner is expressly forbidden at any time.

The above guidance also applies to sleep inducing drugs.

PT. Smart Cakrawala Aviation has a strong commitment to ensuring the welfare of aviation workers and protecting the lives and property entrusted to us.

Use of psychoactive substances is a growing threat throughout the world to the health and safety of all people.

Employees who engage in problematic substance use not only endanger others, they also put their jobs in jeopardy. No aviation worker who engages in

problematic substance use will be permitted to perform those duties until PT. Smart Cakrawala Aviation is satisfied that he or she no longer poses a risk to aviation safety.

Society and industry have become increasingly concerned about the dangers of drugs and alcohol misuse. PT. Smart Cakrawala Aviation, in common with other leading companies, has defined policies to take account of the risk to the public, employees and company assets.

That means striving to ensure, among other things, that the workplace is free from the effects of what is commonly called substance misuse:

1. The use of illegal drugs,
2. The misuse of legal drugs or other substances,
3. The misuse of alcohol.

The problem is no one person's or group's responsibility, it concerns the whole company.

PT. Smart Cakrawala Aviation is committed to providing a workplace that is safe in every sense and fully productive, so that everyone can carry out their jobs and fulfill their responsibilities unhindered.

The company will consider any case of structural substance abuse as a problem like any other illness or physical or psychological disorder and treat it in a non-punitive and confidential way.

Therefore employees are urged to take action in case a colleague is noticed to have a problem of this nature. This action may imply reporting to the company physician or the Chief Pilot concerned.

## 7.1.6. Medication (Pharmaceutical Preparation)

Drugs and medications, whether prescribed or bought over the counter, may have undesirable side effects, which are liable to impair the ability of aircrew to carry out their functions. Such effects may vary considerably between individuals, and in some cases may occur only at altitude. Aircrew taking prescribed medication should therefore inform the company doctor or seek aero-medical advice before commencing or continuing with flying duties.

Aircrew taking medication, which does not require a prescription, should seek similar advice and assurance from the company doctor. A list of the effects of some common medications and drugs is included below, to be used as a guide. Some of the listed effects may not be experienced by all individuals. Some are too mild to be noticeable but under certain conditions could have an important influence. Therefore, under no circumstances should the limitations indicated below be reduced.

General medications in common use:	Effect of use:
Allergy Testing:	Do not fly for six hours after testing.
Antihistamines:	Drowsiness, dizziness, dry mouth, headaches, nausea. Do not fly for 24 hours after stopping

	medication.
Anesthetics:	Local injections (dental “freezing”, local minor surgery) procedure. Local discomfort may cause excitement and convulsions. Do not fly for 24 hours.
Anesthetic ointments:	May cause irritation and local allergic reactions. Flying permissible if no side effects.
Antibiotics	The medical condition requiring antibiotics (infections) usually precludes flying. (Penicillin, sulphas, tetracycline, erythromycin, chloromycetin, etc.)
Ointments	No harm in normal doses.
<u>Cardiovascular medications</u>	
Digitalis:	Medical condition precludes flying.
Diuretics (water pills):	Easily disturb body chemistry. Do not fly for 48 hours after use.
Blood pressure drugs (Some blood pressure drugs are now allowed. Contact company doctor)	May cause many side effects. High blood pressure usually precludes flying.
Iron, vitamins:	No ill effects.
<u>Cold Medications (A Cold is generally a condition that precludes flying)</u>	
Antihistamines	Effects as with other antihistamines, drowsiness most severe. Do not fly for 24 hours after use.
Cough suppressants:	May contain antihistamines and/or codeine. Do not fly for 24 hours after use
Nasal sprays	No ill effects in moderate amounts. Excess may cause trembling, pallor, nervousness.
Gargles/mouthwashes	No ill effects.
<u>Pesticides &amp; Insecticides</u>	
Chlorinated	Acute poisoning causes severe vomiting, weakness, numbness, excitement, diarrhea, and convulsions. Gradual accumulation of poison causes unwell feeling, weight loss, weakness, mild shaking of muscles. Do not fly without reference to a doctor.
Cholinesterase inhibitors	Mild poisoning causes appetite loss, headache, dizziness, visual difficulty and constriction of the pupils. Moderate poisoning causes nausea, vomiting, abdominal cramps, sweating, shaking. Severe poisoning causes breathing difficulty, pinpoint pupils, convulsions and coma. Do not fly without reference to a doctor.

<u>Anti-Malarias</u>	
Larium:	Prohibited for use by all aircrew members.
Fansidar	Feeling faint, rashes forming on body, increase in heartbeat. Do not fly for 24 hours after use.
Halfan	May lead to abdominal pain and stooling.
Metakalfin	Occasional general feeling of weakness.
Nivaquine, Chloroquine,	Causes nausea, itching, drowsiness and visual disturbances
Camoquine	Do not fly for 24 hours after use.
<u>Sedatives</u>	
Barbiturates	Causes sleepiness, impairment of consciousness and judgment. Do not fly for 24 hours.
Sleeping pills:	Causes sleepiness, impairment of consciousness and judgment. Do not fly for 24 hours.
Alcohol:	Causes apparent stimulation through impairment of higher judgment centres. Impairs coordination and motor control. Do not fly for 8 hours, minimum.
<u>Stimulants</u>	
Stimulants	Cause wakefulness, nervousness, impaired judgment and fatigue. Do not fly for 24 hours.
Reducing pills	Cause wakefulness, nervousness, impaired judgment and fatigue. Do not fly while using them.
Caffeine (coffee, tea)	No ill effects in normal beverage quantities. Excessive amounts cause nervousness, wakefulness, tremor, indigestion and heart effects.
<u>Digestive System Drugs</u>	
Antacids	No ill effects except for Alka-Seltzer, ENO and other bicarbonates, which produce gas in the stomach.
Antispasmodics:	Cause dryness of mouth, dilated pupils, blurred vision, and difficulty in urination. You should not fly for one week after beginning treatment and then only if well controlled.
Peptic Ulcer	Precludes flying.
Stool softeners	No ill effects.
Laxatives	May cause diarrhea. Wait 12 hours before flying.

Antidiarrheal drugs:	No ill effects unless they contain opium, which sometimes causes drowsiness, sleepiness, slow reaction Do not fly for 12 hours if they contain Opium. Diarrhea usually precludes flying.
Hemorrhoid medication	No ill effects.. Significant hemorrhoids preclude flying.
<u>Immunizations</u>	
Tetanus, Smallpox, Oral Polio	No ill effects.
PTP and other vaccine.	May cause pain, nausea, vomiting, and unwell feeling. Do not fly for 24 hours or longer if effects persist.
<u>Pain Killers</u>	
Salicylates	No ill effect in normal low doses.
Codeine and Injections:	May cause depression, nausea, vomiting abdominal pain, slow respiration. Do not fly for 12 hours. Pain and its cause preclude flying.
<u>Tranquilizers</u>	
Tranquilizers	Weakness, chilliness, stuffed nose, blurred vision, dry mouth, low blood pressure, drowsiness, shakiness. Medical and mental condition preclude flying. Do not fly for 24 hours after use.
Mood elevators:	Weakness, chilliness, stuffed nose, blurred vision, dry mouth, low blood pressure, drowsiness, shakiness. Do not fly for one week after use. Medical condition precludes flying.
Vitamins:	No ill effects in usual doses. If taken in large doses for a severe medical condition, the condition precludes flying.

It is essential that aircrew is guided by common sense in this matter. Accidents have occurred in the past as a result of otherwise competent aircrew believing that their experience would compensate for the fact that they felt unwell or were undergoing treatment.

### 7.1.7. Immunization

Medical advice is to be sought concerning the period to be observed before returning to flying duties following immunization.

It is the responsibility of all aircrew to ensure that their health certificates are valid and up to date, appropriate to the country in which they are resident, or to which they may be liable, in the course of their duties, to travel. Injections remain valid as follows, but requirements and validity may change from time to time, check with the company doctor or his representative.

Cholera	Validity 6 months, effective 6 days after the injection or immediately following revaccination within the period.
Tetanus	Validity 5 years, effective immediately is following the injection.
T.A.B	Validity 3 years, effective immediately is following the injection.
Yellow Fever	Validity 10 years, effective 10 days following the injection.
Gamma Globulin	Can cause an immune deficiency and has mostly been discontinued.
Anti-Malaria medication:	On company doctor's advice.
Hepatitis & Meningitis:	On company doctor's advice.

so, they are to advise the Company immediately following each donation, and shall not undertake flying duties for at least 24 hours after they have given blood. Pilots assigned to the SAN/ALCS contract will not fly for 72 hours after giving blood.

#### 7.1.8. Scuba Diving

Due to the highly soluble nature of nitrogen and the relative ease of absorption into the bloodstream at increased atmospheric pressure, Smart Cakrawala Aviation crewmember shall avoid scuba diving.

Scuba diving restriction in connection to flying:

- If diving not more than 20 feet deep, must take a rest minimum 24 hours before flying.
- If diving more than 20 feet deep, must take a rest minimum of 48 hours before flying.
- No restriction on snorkeling diving.

No person will knowingly transport a passenger who has been scuba diving within the last 48 hours, unless fitness for flight can be assured by a qualified person.

#### 7.1.9. Meals

Sensible precautions should be taken to avoid the risk of food poisoning (e.g. from shellfish of dubious freshness). Particularly when meals are taken or uplifted enroute, pilots operating together should select different items from the menu to reduce the possibility that both of them could become incapacitated.

#### 7.1.10. Sleep and Rest

Although the controls on flight and duty periods are intended to ensure that adequate opportunities are provided for crew members to obtain rest and sleep, individuals should ensure that proper advantage is taken of such opportunities.

A crew member shall not perform duties in flight if he knows or suspects that he is suffering from fatigue, or feels unfit to the extent that the flight may be endangered.

## 7.1.11. Fitness

No individual shall act as a member of the crew of a PT. Smart Cakrawala Aviation aircraft if, for any reason, his physical or mental condition is such that it could endanger the safety of the aircraft or its occupants.

## 7.1.12. Surgical Procedures

Aero-medical advice should be sought prior to returning to flying duties following any surgical procedure. Crews should not fly for at least 24 hours following a local anesthetic injection for dental treatment and at least 48 hours after a general anesthetic.

## 7.1.13. Blood Pressure

- a. Smart Cakrawala Aviation will examine medical condition for each pilot and engineer for each first flight of the day before performing their duties for operational of the aircraft.  
Smart Cakrawala Aviation prepare medical condition monitoring system for each pilot, and engineer before performing their duties for operational of the aircraft and examining minimum for blood pressure and alcohol contamination for each flight.
- b. Smart Cakrawala Aviation will not assign the flight crew member for operational of aircraft if the pilot found exceeds the reference point. The corrective action must be performed until the pilot meet the recommended reference point before reassign to duty.

**Aviation Blood Pressure Chart**

Blood Pressure	optimal	Normal	High Normal	Hypertension	SCA Limit
Systolic (top #)	<120	<130	130-139	140 or higher	155 or higher
Diastolic (lower#)	< 80	< 85	85-90	90 or higher	95 or higher

### Note:

If during examination Smart Cakrawala Aviation flight crew members blood pressure found in excess of optimal, normal, or high normal range, the flight crew member will be grounded temporally.





# OPERATION MANUAL

## PART A GENERAL

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## **8. OPERATING PROCEDURES**

### **8.1. GENERAL**

Performance is apart from the airworthiness requirements. Together with associated operational rules they are intended to ensure a satisfactory safety level in civil aviation as far as performance of the aircraft concerned.

Operating of PT. Smart Cakrawala Aviation aircraft is covered by the standards promulgated in the CASR Part 135.

The basic runway length and associated lengths of stop way and clear way, on which the take-off weight,  $V_i$  and landing distances, have been based.

## **8.2. FLIGHT PREPARATION INSTRUCTIONS**

Each aircraft of PT. Smart Cakrawala Aviations is operated in compliance with the terms of its Airworthiness Certificate and within the approved limitations contained in its Aircraft Flight Manual/POH. Operations shall be conducted in accordance with any restrictions imposed by the CASR's or the DGCA.

1. An ICAO ATS Flight Plan and Operational Flight Plan must be completed for each intended flight.
2. The PIC shall not commence a flight unless he is satisfied that:
  - a. The aircraft is airworthy;
  - b. The aircraft configuration is in accordance with the Configuration Deviation List (CDL) (where available);
  - c. The instruments and equipment required for the flight in accordance with the regulations, are available;
  - d. The instruments and equipment are in an operable condition except as provided in the Minimum Equipment List (MEL);
  - e. Those parts of the Company Operations Manual which are required for the conduct of the flight are available;
  - f. The documents, additional information and forms required are on board;
  - g. Current maps, charts and associated documents or equivalent data are available to cover the intended operation of the aircraft including any diversion which may reasonably be expected;
  - h. Ground facilities and services required for the planned flight are available and adequate;
  - i. The provisions specified in the Company Operations Manual in respect of fuel, oil and oxygen requirements, minimum safe altitudes, aerodrome operating minima and availability of alternate aerodromes where required, can be complied with for the planned flight;
  - j. The load is properly distributed and safely secured;
  - k. The mass of the aircraft at take-off will be such that the flight can be conducted in compliance with Weigh and Balance Procedure inclusive and the Aircraft Operating Manual; l. Any limitation in addition to those covered by sub-paragraphs i and k) above can be complied with.
  - l. The documents, forms, and additional information to be carried as listed in Operations Manual Part A, and,
  - m. That all relevant emergency equipment is easily accessible for immediate use and remains so during the flight.
  - n. The preflight inspection and exterior aircraft check are successfully performed.

## **8.3. MINIMUM FLIGHT ALTITUDES**

As a basic principle, no flight shall be operated below the minimum safe altitudes except for the take-off/Departure or the approach/landing.

### **8.3.1. Flight Preparation-Minimum Flight Altitude Determination**

During flight preparation, the en-route minimum altitudes must be established for all the route segments.

If necessary, diversion procedures must be established for critical cases (engine failure, depressurization) taking into account the topography along the route.

For engine failure; the net flight path as defined in the aircraft Flight Manual must be considered.

Furthermore, Point (s) of Non-Return (PNR) must be determined and the appropriate procedures established (drift down on course or turn back depending on the aircraft position), when required.

When obstacle limited, the pilot should be reminded for correct drift down procedure.

#### **Day VFR operations**

The PIC shall not operate any aircraft under VFR during the day at an altitude less than 1,000 feet above the surface or less than 1,000 feet from any mountain, hill, or other obstruction to flight.

Except when necessary for takeoff or landing, no Smart Cakrawala Aviation pilot may operate an aircraft below the following altitudes:

- a. Anywhere. An altitude allows, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.
- b. Over congested areas. Over any congested area of a city, town, or settlement, or over any open-air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 600 meters of the aircraft.
- c. Over other than congested areas. An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 200 meters to any person, vessel, vehicle, or structure.

### 8.4. CRITERIA FOR DETERMINING THE USABILITY OF AERODROMES / AIRSTRIPS

#### 8.4.1. General

Aerodrome Classification Determination Process considering 17 characteristic factors such as:

Airstrip elevation, runway length, surface, slope, direction, navigation aid, communication/radio reporting/fuel availability, airstrip facility/maintenance, weather phenomena, special required/procedure approach/landing/go-around, obstacles, weight restriction, illusion problem, security factor and other risks.

Each characteristic factor is given multiplier factor to determine its risk score, and then all 17 characteristic factor scores are sum up together and if the total risk score.

#### 8.4.2. Airstrip /Airport Grouping and Airport Categorization

Code number	Aeroplane reference field length	Code letter	Wingspan	Outer main gear wheel span
1	Less than 800 m	A	Up to but not including 15 m	Up to but not including 4.5 m
2	800 m up to but not including 1,200 m	B	15 m up to but not including 24 m	4.5 m up to but not including 6 m
		C	24 m up to but not including 36 m	6 m up to but not including 9 m
3	1,200 m up to but not including 1,800 m	D	36 m up to but not including 52 m	9 m up to but not including 14 m
4	1,800 m and over	E	52 m up to but not including 65 m	9 m up to but not including 14 m
		F	65 m up to but not including 80 m	14 m up to but not including 16 m

**KP 39 Tahun 2015 Aerodrome Reference Code** - A code number linked to the reference field length and a code letter linked to the wingspan and the outer main gear wheel span. According to the table Aerodrome, PT Smart Cakrawala Aviation must use Cessna C208 POH or Pilatus PC-6/B2-H4 AFM for take-off and landing distance, Limitation, and performance.

#### 8.4.3. Take-Off Alternate Airport

Selection of a take-off alternate is necessary if meteorological and/or performance considerations preclude return to the departure airport.

#### 8.4.4. Selection of Alternate Aerodromes

In selecting alternate aerodromes, due regard shall be paid to the following:

- Navigational and landing facilities
- Meteorological conditions
- Aircraft performance
- Customs, immigration, and health regulation facilities
- Distance destination-alternate with regard to the payload and fuel economy
- Crew and aeroplane scheduling and the traffic aspects for the following days
- NOTAM

## 8.5. ENROUTE OPERATING MINIMA FOR VFR FLIGHTS

### 8.5.1. Basic VFR Weather Minimums

Except as provided in this paragraph and under Special VFR (see this sub-Section 8.5.2. Special VFR Weather Minimums) Smart Cakrawala Aviation pilot will not operate an aircraft under Day VFR when the flight visibility is less or at a distance from clouds that is less, than that prescribed for the corresponding altitude in the following table:

Airspace	Flight Visibility	Distance / Clouds
CLASS A	Not Applicable	Not Applicable
CLASS B	8 km above 10.000 feet 5 km below 10.000 feet	Clear of clouds
CLASS C	8 km above 10.000 feet 5 km below 10.000 feet	1,000 feet above 1,000 feet above 1,500 meters horizontal
CLASS D	8 km above 10.000 feet 5 km below 10.000 feet	1,000 feet above 1,000 feet above 1,500 meters horizontal
CLASS E	8 km above 10.000 feet 5 km below 10.000 feet	1,000 feet above 1,000 feet above 1,500 meters horizontal
CLASS F	8 km above 10.000 feet 5 km below 10.000 feet. The higher of: 3000 feet AMSL 5 km or 1000 feet AGL in sight	1,000 feet above 1,000 feet above 1,500 meters horizontal Clear of clouds
CLASS G	8 km above 10.000 feet 5 km below 10.000 feet. The higher of: 3000 feet AMSL 5 km or 1000 feet AGL in sight	1,000 feet above 1,000 feet above 1,500 meters horizontal Clear of clouds

### 8.5.2. Special VFR Weather Minimums (CASR 91.157)

When visibility is less than 3 miles (see this Sub-part, Section 8.5.1., Basic VFR Weather Minimums) in controlled airspace, a pilot may request from ATC a clearance to enter, leave, or operate in a control zone under Special VFR. An ATC clearance may be granted, traffic permitting, providing such flight will not delay IFR operations in the control zone, and the aircraft can remain clear of clouds. Smart Cakrawala Aviation pilot will not operate under Special VFR in a control zone unless he can remain clear of clouds.

Special VFR clearances are effective within control zones only, and ATC will provide traffic separation between special VFR flights and other IFR flights in the control zone. ATC does not provide separation once the aircraft leaves the control zone.

A special VFR clearance does not assign specific altitudes as the flight must remain clear of clouds. The controller may require the pilot to fly above or below a specific

altitude to avoid other traffic, but this altitude will not be lower than the minimum safe altitude in the control zone.

When a pilot has received a Special VFR ATC clearance, the weather minimums of this section instead of those contained in this sub-part, Section 8.5.1. Basic VFR Weather Minimums apply to the operation of an aircraft by that pilot in a control zone under VFR:

1. Smart Cakrawala Aviation pilot will not operate an airplane in a control zone under VFR except clear of clouds.
2. Smart Cakrawala Aviation pilot will not take off or land an aircraft at any airport in a control zone under VFR:
  - Unless ground visibility at that airport is at least 1 statute mile; or,
  - If ground visibility is not reported at that airport, unless flight visibility during landing or takeoff is at least 1 statute mile.
3. Smart Cakrawala Aviation pilot will not operate an airplane in a control zone under the special weather minimums of this section, between sunset and sunrise unless:
  - That pilot holds a current instrument rating; and
  - The airplane has a standard category airworthiness certificate

### 8.5.3. VFR Flight Guidance

#### 8.5.3.1. Background

Infringement of controlled airspace, danger and restricted areas etc. is a serious aviation hazard and occurs when an aircraft enters the airspace without permission. Careful planning, and accurately flying the plan, are the best means of avoiding such infringements. However, it is important that pilots understand the rules they are expected to follow.

This is one Guidance intended to help pilots keep out of trouble

#### 8.5.3.2. Flight Rules

Flight Rules are laid down internationally (as “Standards and Recommended Practices” in Annex 2 to the Chicago Convention) to prevent collisions with other aircraft and the ground. However, different countries have slightly different needs, so they sometimes have their own extra rules, and may interpret the international rules differently. Any 'Differences' from ICAO Standards must be written in the State's AIP, so when flying internationally pilots must ensure they are aware of the differences in all the countries over which they intend to fly, including their own.

#### 8.5.3.3. General Rules

The “General Rules” are those dictating who has right of way in given situations, and which aircraft types have priority when aircraft are on converging courses. If there is a risk of collision, both pilots must act in accordance with these General Rules. A pilot who is required to give way should alter course to the right, and one who has

the right of way should maintain course and speed but should also be prepared to take avoiding action if the other does not give way.

For a pilot to follow the General Rules, he or she must know where the other aircraft (and the ground) are, to avoid them. If they are relying on their eyes to avoid collisions, they need to also follow specified “Visual Flight Rules”

(VFR). Otherwise, the pilot must rely on instruments to provide separation from other aircraft and the ground; he or she must follow the “Instrument Flight Rules” (IFR). However, a pilot following IFR in Visual Meteorological Conditions (VMC) should look out of window to avoid collision with other aircraft. Although the basic rules remain the same, some detailed requirements for both VFR and IFR vary depending on the class of air- space in which the aircraft is flying.

#### **8.5.3.4. Visual Flight Rules**

Internationally, as also described in OM Part A Chapter 8, a pilot is required to stay more than 1000 feet above any obstacles in a “congested area” or above any large collection of people. Over uncongested areas, he or she must stay more than 500 feet above the ground. Also, loss of engine power needs to be considered when operating a single engine aircraft.

The UK is unique. In that country, pilots following VFR may fly below 500 feet, but they must stay more than 500 feet away from any people or anywhere people might be expected (vehicles, vessels, or structures).

According to the German AIP in addition to the mentioned obstacle clearance, pilots must be 2000 ft above ground or water when on a cross country flight.

To follow VFR, it is internationally agreed that a pilot must be able to see a certain distance ahead of him. Generally, there must be no cloud within 1500 meters horizontally or 1000 feet vertically from the aircraft, and the “flight visibility” (the distance forward the pilot could see from the cockpit in flight) must be at least 8 km. The VFR therefore require the pilot to fly his or her aircraft to stay at least that distance from cloud and in conditions of at least that visibility.

Below 10,000 feet, a flight visibility of 5km is considered enough for pilots to see each other. At very low altitudes (usually below 3000 feet) outside controlled air-space (in classes F & G), individual countries may allow flight closer to cloud and in even lower visibility, provided the air- craft is flying slowly (below 140 knots), and the pilot can see the ground. Ensure you check the relevant AIP.

In addition to avoid the ground and staying away from cloud and in conditions of good visibility, if a pilot is cruising (staying on a constant track at a constant altitude, usually at or above 3000 feet MSL), he or she is required to keep to one of an allocated series of altitudes (or Flight Levels if above the Transition Altitude - see the AIP for each country).

#### **8.5.3.5. VFR Cruising Altitude or Flight Level**

Except while holding in a holding pattern of 2 minutes or less, or while turning, each person operating an aircraft under VFR in level cruising flight more than 3,000 feet

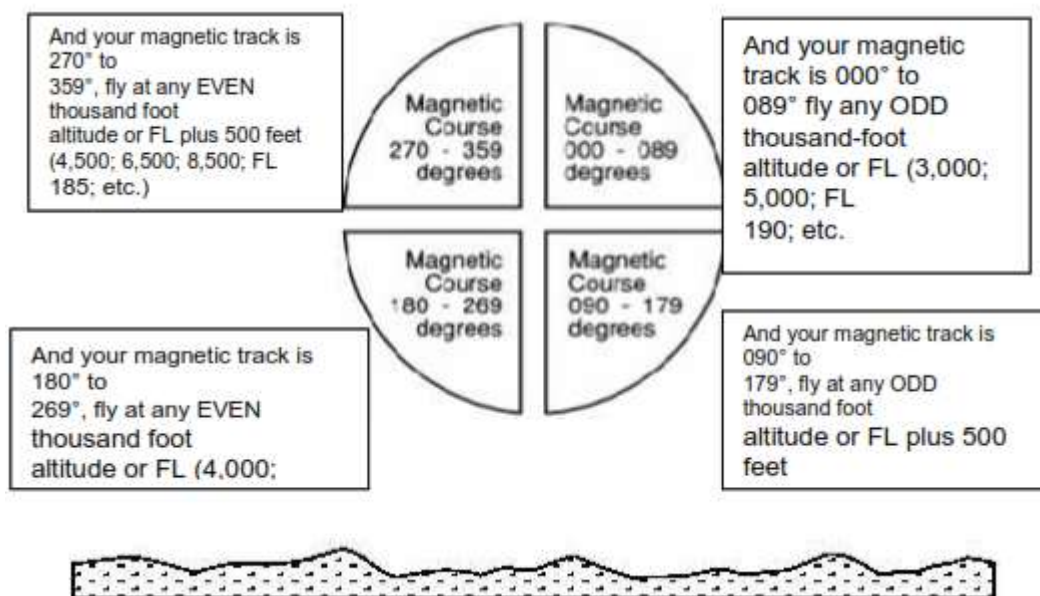


above the surface shall maintain the appropriate altitude or flight level prescribed below, unless otherwise authorized by ATC:

**When operating below 20,000 feet:**

1. On a magnetic track of zero degrees through 089 degrees any ODD thousands of feet (FL);
2. On a magnetic track of 090 degrees through 179 degrees any ODD thousands of feet (FL) plus 500 feet;
3. On a magnetic track of 180 degrees through 269 degrees any EVEN thousands of feet (FL)
4. On a magnetic track of 270 degrees through 359 degrees any EVEN thousands of feet (FL) plus 500 feet;

If you are above 3,000 feet AGL, but below Flight Level 200 (except within Positive Control Airspace)



Pilots flying under VFR should also be aware that the quarter system may not always ensure vertical separation to other flights. This is the case when two flights are at the same level on slowly converging courses. If you see an aircraft a few miles away from you and you hardly see its position changing, then there is a big chance that you are on collision course. Furthermore, as the other aircraft hardly changes its relative position to your aircraft it is hard to detect it visually.

### 8.5.3.6. Controlled Airspace

OM-A chapter 8.5 gives guidance for pilots wishing to enter or cross Controlled Airspace. However, it is important to remember that you ALWAYS need a clearance to enter controlled airspace (except for class E air-space), and when inside you must obey the controller's instructions.

However, if you are following a VFR clearance inside Controlled Airspace, you are still responsible for obeying not only the VFR Rules, but also the General Rules. If

your clearance would prevent you doing this, you must tell the controller and ask for a different clearance.

## **8.6. PRESENTATION AND APPLICATION OF AIRPORT AND EN-ROUTE OPERATING MINIMA**

### **8.6.1. Presentation**

Weather information data (visibility and cloud base) must be available before every departure and landing.

Weather information data can be got by:

**If aircraft on ground,**

- Weather information from airport Briefing Office.
- Weather information from BMKG.
- Satellite data BMKG from the internet.
- METAR and TAFOR report.
- Actual airport weather information and condition from destination airport by cellular phone or satellite phone.
- Long range radio contact using company HF channel.
- Long range radio contact using aircraft HF channel.

**If aircraft on the air (as PIC duty),**

- Radio contact using company VHF channel.
- Long range radio contact using company HF channel.
- Radio contact using airport services VHF channel.
- Long range radio contact using community/government HF channel.

After all the weather information received, then it is the PIC decision to commence a flight or waiting for the weather to improve before commence a flight.

### **8.6.2. Application**

Smart Cakrawala Aviation pilot will not takeoff or land an aircraft under Day VFR when the reported ceiling is less than 1,000 feet and the visibility is less than 5 km.

All Smart Cakrawala Aviation pilot shall not commence a flight if the reported weather condition below the requirement by Day VFR for taking off.

All Smart Cakrawala Aviation pilot shall not make a landing attempt to an airport if the reported weather condition below the requirement by Day VFR for landing. If this condition happens, then the pilot must proceed to the landing alternates or must return to base.

The Pilot in Command may not begin a flight unless the PIC is thoroughly familiar with reported and forecasted weather conditions on the route to be flown and until the PIC has obtained all available weather report at airport destination that may affect the safety of the flight.

During the flight, the PIC must obtain any additional available information on meteorological conditions on along route to be flying (special weather of en-route alternate or alternate if available as applicable).

## **8.7. INTERPRETATION OF METEOROLOGICAL INFORMATION**

### **8.7.1. General**

All flight crews are required to develop and maintain a sound working knowledge of the system used for reporting aerodrome actual and forecast weather conditions and of the codes associated with it. Routine actual weather reports (METARs) are compiled half-hourly or hourly at fixed times while the aeronautical meteorological station is open. They may include the following terms to clarify the codes used in reporting the various elements:

- a. Air Temperature and Dew point. The air temperature and dew point are shown in degrees Celsius, separated by an oblique stroke.
- b. 'CAVOK' will replace the visibility statement, meaning that weather and cloud groups when the visibility is 10 km or more; there is no cloud below 5000 feet, and no cumulonimbus; and there is no precipitation, thunderstorm, shallow fog.
- c. Cloud. Up to four cloud groups may be included, in ascending order of their bases.
- d. Up to four cloud groups may be included, in ascending order of their bases. Each group consists of three letters to indicate the amount
- e. FEW, or few = 1 to 2 oktas, SCT, or scattered = 3 to 4 oktas; BKN, or broken, = 5 to 7 oktas, OVC, or overcast = 8 oktas
- f. Horizontal Visibility. When there is no marked variation in the visibility by direction, the minimum is given in meters.
- g. Pressure Setting. The QNH is rounded down to the next whole millibar and reported as a four-figure group preceded by the letter 'Q'. If the QNH value is less than 1,000 Mbs, the first digit will be '0', e.g. 'Q0993'.
- h. Trend. A trend group is added when significant changes in conditions are forecast to occur during the two hours following the time of observation.
- i. The codes 'BECMG' (becoming) or 'TEMPO' (temporarily) are used, and may be followed by a time group (in hours and minutes UTC) preceded by one of the indicators 'FM' (from), 'TL' (until) or 'AT' (at).
- j. Windshear. group may be included if windshear is reported along the take-off or approach paths in the lowest 1600 ft with reference to the runway in use. 'WS' is used to begin the group as in the examples: 'WS TKOF RWY20', 'WS LDG RWY20'.

### **8.7.2. Aerodrome Weather Forecasts (TAFs)**

Aerodrome weather forecasts (TAFs) are usually issued to describe the forecast conditions at an aerodrome covering a period of 9 to 24 hours. The validity periods of many of the longer forecasts may not start for up to 8 hours after the time of origin and the forecast details only cover the last 18 hours. The 9-hour TAFs are updated and re-issued every 3 hours, and those valid for 12 and 24 hours, every 6 hours.

Amendments are issued as and when necessary. A TAF may be sub-divided into two or more self-contained parts by the use of the abbreviation 'FM' (from) followed by the time UTC to the nearest hour, expressed as two figures.

Many of the groups used for METARs are also used in the TAFs but differences are noted below:

- a. Amendments.  
When a TAF requires amendment, the amended forecast will have 'AMD' inserted between 'TAF' and the aerodrome identifier, and will cover the remainder of the validity period of the original forecast.
- b. Cloud.  
When clear sky is forecast, the cloud group will be replaced by 'SKC' (sky clear). When no cumulonimbus, or clouds below 5000 ft or below the highest minimum sector altitude, whichever is the greater, are forecast, but 'CAVOK' or 'SKC' are not appropriate, the abbreviation 'NSC' (no significant cloud) will be used.
- c. Horizontal Visibility.  
The minimum visibility only is forecast; RVR is not included.
- d. Probability.  
The probability of a significant change occurring will be given as a percentage, but only 30% and 40% will be used. The abbreviation 'PROB' will precede the percentage, which will be followed by a time group, or a change and time group, e.g. 'PROB 30 0507 0800FG BKN004', or 'PROB40 TEMPO 1416 TSRA BKN010CB'.
- a. Significant Changes.  
In addition to 'FM' and the time (see above) significant changes may be indicated by the abbreviation 'BECMG' (becoming) or 'TEMPO' (temporarily). 'BECMG' is followed by a four-figure group indicating the beginning and ending of the period in which the change is expected to occur. The change in the forecast conditions is expected to be permanent, and to occur at an unspecified time within this period. 'TEMPO' will similarly be followed by a four-figure time group; it indicates a period of temporary fluctuations in the forecast conditions which may occur at any time during the stated period. The 'TEMPO' conditions are expected to last less than one hour in each instance, and in aggregate, less than half the period indicated.
- b. Weather.  
If no significant weather is expected, the group is omitted. After a change group, however, if the weather ceases to be significant, the abbreviation 'NSW' (no significant weather) will be inserted.
- c. Validity Period.  
Whereas a METAR is a report of conditions at a specific time, the TAF contains the date and time of origin, followed by the start and finish times of the validity period in whole hours UTC, e.g. 'TAF EGLL 130600Z (date and time of issue) 0716 (period of validity 0700 to 1600 hours UTC)

## **8.8. OTHER INFORMATION**

### **8.8.1. NOTAM**

A Notice to Airmen (NOTAM) is a notice filed with an aviation authority to alert aircrafts pilots of potential hazards along a flight route or at a location that could affect the safety of the flight. NOTAMs are unclassified notices or advisories distributed by means of telecommunication that contain information concerning the establishment, conditions or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel and systems concerned with flight operations.

NOTAM are created and transmitted by government agencies and airport operators under guidelines specified by Annex 15: Aeronautical Information Services.

The government agencies and airport operators provides a means of disseminating relevant NOTAMs to pilots.

NOTAMs are issued (and reported) for a number of reasons, such as :

- Hazards such as air shows, parachute jumps, kite flying, lasers, rocket launches, etc.
- Flights by important people such as heads of state (sometimes referred to as temporary flight restrictions, TFRs)
- Closed runways
- Inoperable lights on tall obstructions
- Temporary erection of obstacles near airfields (e.g., cranes)
- Passage of flocks of birds through airspace (a NOTAM in this category is known as BIRDTAM)
- Any airport/area to be visited or traveled by the President and or the Vice President.
- Flight Limitation in the Proximity of Space Flight Operations Issued by authority
- Temporary Restriction on Flight Operations During Abnormally High Barometric Pressure Conditions.
- Notifications of runway/taxiway/apron status with respect to snow, ice, and standing water (a SNOWTAM)
- Notifications of an operationally significant change in volcanic ash or other dust contamination (an ASHTAM)

PT. Smart Cakrawala Aviation policy that operations staff/ pilot at the OCC will be responsible of collection the NOTAMs. All NOTAMs will be collected in one folder. Any revision on NOTAMs must be inserted into folder immediately. The folder must be place at the counter desk and be ready for pilot read during preparation of a flight.

## **8.8.2. NOTOC / Notification to Captain/Special Load Notification**

In the aviation NOTOC refers to Special Load Notification to Captain or simply Notification to Captain.

The NOTOC is divided into 2 parts :

- Dangerous Goods,
- Other Special Load

Special Load Notification must be given to the Captain of all aircraft carrying Dangerous Goods. This takes the form of a (NOTOC). This document has to provide all relevant information about each Dangerous Goods shipment on that particular flight. It is entirely up to the pilot in command whether he/she accepts the Dangerous Goods on board and in the case of spontaneously combustible materials, it is not unusual for the pilot to refuse these articles onboard.

A NOTOC is a record of who handled the Dangerous Goods and Who is responsible for its correct handling and storage. Warehouseman has to sign if it is put into a ULD to say it was placed/secured safely. The loader in charge of loading the flight has to sign to say the ULD was loaded safely and the pilot has to sign to say he has accepted that the handling and acceptability meets with their approval.

## **8.9. DETERMINATION OF THE QUANTITIES OF FUEL AND OIL CARRIED**

### **8.9.1. Introduction**

The Smart Cakrawala Aviation fuel policy specifies the fuel requirements for flight planning.

No flight is to commence unless the fuel on board satisfies the minimum requirements laid down in this section.

These minimum standards in no way detract from the Captain's responsibility to satisfy himself that the total fuel load is adequate for the flight after taking into account all known relevant factors.

### **8.9.2. Minimum Fuel Requirement for Airplane (CASR 135.637)**

Smart Cakrawala Aviation will not release/dispatch or takeoff an airplane for operations within Indonesia, unless there is enough fuel supply, considering airplane mass, notice to airman, meteorological conditions, MEL/CDL, and any delays that are expected in flight, to include the following:

1. Taxi fuel – which shall be the amount of fuel expected to be consumed before takeoff;
2. Trip fuel – which shall be the amount of fuel required to enable the airplane to fly from take-off, or the point of in-flight re-planning, until landing at the destination aerodrome taking into account the operating conditions in the data provided by the manufacturer;
3. Contingency fuel – which shall be the amount of fuel required to compensate for unforeseen factors. It shall be five percent of the planned trip fuel or of the fuel required from the point of in-flight re-planning based on the consumption rate used to plan the trip fuel, but in any case, shall not be lower than the amount required to fly for five minutes at holding speed at 450 m (1500 ft) above the destination aerodrome in standard conditions;
4. Destination alternate fuel – which shall be:
  - i. Where a destination alternate aerodrome is required, the amount of fuel required to enable the airplane to:
    - a. Perform a missed approach at the destination aerodrome;
    - b. Climb to the expected cruising altitude;
    - c. Fly the expecting routing;
    - d. Descend to the point where the expected approach is initiated; and
    - e. Conduct the approach and landing at the destination alternate aerodrome; or
  - ii. Where two destination alternate aerodromes are required, the amount of fuel, as calculated in (4)(i) above, required to enable the airplane to proceed to the destination alternate aerodrome which requires the greater amount of alternate fuel; or
  - iii. Where a flight is operated without a destination alternate aerodrome, the amount of fuel required to enable the airplane to fly for 15 minutes at holding



- speed at 450 m (1500 ft) above destination aerodrome elevation in standard conditions; or
- iv. Where the aerodrome of intended landing is an isolated aerodrome:
    - a. For a turbine-engine airplane, the amount of fuel required to fly for two hours at normal cruise Consumption above the destination aerodrome, including final reserve fuel;
  5. Final reserve fuel – which shall be the amount of fuel calculated using the estimated mass on arrival at the Destination alternate aerodrome, or the destination aerodrome when no destination alternate aerodrome is required, or a pre-calculated value for each airplane type and variant in the fleet rounded up to an easily recalled figure:
    - a. For a turbine-engine airplane, the amount of fuel required to fly for 30 minutes at holding speed at 450 m (1500 ft) above aerodrome elevation in standard conditions;
  6. Additional fuel – which shall be the supplementary amount of fuel required if the minimum fuel calculated in accordance with trip fuel, contingency fuel, destination alternate fuel and final reserve fuel above is not sufficient to:
    - i. Allow the airplane to descend as necessary and proceed to an alternate aerodrome in the event of engine failure or loss or pressurization, whichever requires the greater amount of fuel based on the assumption that such a failure occurs at the most critical point along the route;
      - a. To fly for 15 minutes at holding speed at 450 m (1500 ft) above the aerodrome elevation in standard conditions; and
      - b. Make an approach and landing;
    - c. Allow an airplane engaged in ETOPS to comply with the ETOPS critical fuel scenario as established by the Authority;
    - d. Meet additional requirements not covered above.
  7. Discretionary fuel – shall be the extra amount of fuel to be carried at the discretion of the PIC.

The DGCA may approve a variation to these requirements provided Smart Cakrawala Aviation can demonstrate an equivalent level of safety will be maintained through a safety risk assessment that includes at least the following:

- Flight fuel calculations;
- Capabilities of Smart Cakrawala Aviation to include:
  - i. A data-driven method that includes a fuel consumption monitoring program; and/or
  - ii. The advanced use of alternate aerodromes; and
- Specific mitigation measures.

### **8.9.3. Minimum Fuel Requirement for Helicopter**

PT Smart Cakrawala Aviation may not release a flight or take off in a helicopter within Indonesia unless it has sufficient fuel to ensure that it can safely complete the flight. In addition, a reserve shall be carried to provide for contingencies.

- a. Helicopter under VFR operations at least the amount sufficient to allow the helicopter Fuel requirements are:



- a) Taxi fuel
- b) Route fuel
- c) Rotors Running fuel
- d) 8% of b (contingency fuel)
- e) Reserve fuel (20 minutes at normal cruise consumption)

#### **8.9.4. Fuel Consumption Rates/Figures**

These can be found in the relevant Aircraft Flight Manual/POH.

Smart Cakrawala Aviation PIC must report to the maintenance if there is abnormalities in the engine fuel consumption rates.

#### **8.9.5. Factors for computing fuel required (CASR 135.641)**

Smart Cakrawala Aviation PIC during computing fuel required for the purposes of this subpart shall consider the following factors:

- a. Wind and other weather conditions forecast;
- b. Anticipated traffic delays;
- c. One instrument approach and possible missed approach at destination;
- d. Any other conditions that may delay landing to unusable fuel.

#### **8.9.6. Oil**

Adequate oil quantity to cover the requirements of trip, contingency, alternate, reserve and taxi must be loaded prior to departure.

The minimum oil quantity requested for any flight is equal to the minimum quantity specified for a particular engine, plus the estimated oil consumption.

The estimated oil consumption shall cover the flight time the aircraft can be operated with the minimum quantity of fuel requested by the fuel planning plus 15 minutes.

#### **8.9.7. Maintenance of Fuel and Oil Carriage and Consumption Records**

- a. Fuel usage records will be passed to the maintenance department, and in addition retained with the flight paperwork and Aircraft Flight & Maintenance log sheets.
- b. Oil usage will be recorded in the flight maintenance log and preserved with same.

## **8.10. WEIGHT AND CENTRE OF GRAVITY**

### **8.10.1. Terminology**

- a. Basic Operating Empty Weight (BOEW)  
The total weight of the aircraft ready for a specific type of operation excluding all useable fuel and traffic load
- b. Maximum Take-off Weight  
The maximum permissible total aircraft weight at take-off.
- c. Traffic load  
The total mass of passengers, baggage and cargo, including any non revenue load
- d. Passenger classification.
  - 1. Adults, male and female, are defined as persons of an age of 12 years and above.
  - 2. Children are defined as persons of an age of two years and above but who are less than 12 years of age. Infants are defined as persons who are less than two years of age.

### **8.10.2. General**

- a. The PIC shall ensure that during any phase of operation, the loading, weight and Centre of gravity of the Aircraft complies with the limitations specified in the approved Pilots Operation Handbook.
- b. The weight and the centre of gravity of any aircraft must be established by actual weighing prior to initial entry into service and thereafter at intervals of not more than 3 years. The accumulated effects of modifications and repairs on the weight and balance must be accounted for and properly documented. Furthermore, Aircraft must be reweighed if the effect of modifications on the weight and balance is not accurately known.
- c. The weight of all operating items and Flight crews included in the aircraft basic operating empty weight must be determined by using actual weight. The influence of their position on the aircraft centre of gravity must be determined.
- d. The weight of the traffic load, must be established by actual weighing.

### **8.10.3. Loading, Weight and Balance**

Weight and balance sheet is to be raised in duplicate for each flight carried out for the purpose of charter air transportation. One copy is to be carried on the aircraft, whilst another, as accepted by the PIC, must be retained on the ground for at least 3 months. Pilots Operation Handbook contains detailed loading instructions, and a sample weight and balance sheet, for the particular aircraft type. Irrespective of whether a 'drop-line' weight and balance document, a standard plan, a load calculator, or a computer program is used in establishing the aircraft's weight and C of G position, the final weight and balance document must contain details of the

disposition of all loaded items, including fuel, and must indicate whether standard or actual weight values have been used.

#### **8.10.4. Weight Values for Crew**

The actual weight of the flight crew including all flight bags and equipment has been determined and that actual weight is included on the Weight and Balance document in the PIC and/or SIC field.

#### **8.10.5. Weight Values for Passengers and Baggage**

The actual weight of each passenger including any carry-on hand luggage is calculated and entered into the weight and balance calculation in the appropriate field determined by the passengers seat location in the aircraft.

For the purposes of calculating a passengers total weight, the weight of a infant carried on a lap (if there is a lap passenger) is added to the weight of the adult passenger and the combined total is entered into the appropriate field based on seating location.

#### **8.10.6. Passenger Seating**

The PIC is responsible for ensuring that the passengers occupy the seats as shown on the load plan.

#### **8.10.7. Weight and Balance Documentation**

The person supervising the loading must confirm by signature that the load and its distribution are as stated on the weight and balance document, this is normally the PIC, which must also contain the name of the person who prepared it (normally the also the PIC). The weight and balance document must be acceptable to, and countersigned by the PIC.

#### **8.10.8. Last Minute Change**

Details of any late alterations in the load must be passed to the PIC, and entered in the 'last minute changes' spaces on the weight and balance document.

#### **8.10.9. Fuel/Oil**

Actual values will be used for fuel. If the weight of the engine oil has not been included in the calculation of basic aircraft weight, it will be included in the basic operating empty weight so that no further account need be taken of it for balance purposes. Whenever possible, the specific gravity of the fuel uplifted is to be used in calculating the weight of the fuel load.

## **8.10.10. Standard Load Plan**

Details of the standard load plans are contained in the Standard Operation Procedures, together with additional limitations on passenger seating positions, fuel, baggage and cargo weight, and the permissible range of C of G travel on which the standard plan is based. Standard load plans are to be used whenever possible to reduce the paper workload of the crew, however the PIC may elect to complete a weight and balance document at any time he feels necessary.

## **8.11. DOCUMENTATION, FORMS AND ADDITIONAL INFORMATION**

### **8.11.1. Documents to Be Carried (135.153, 91.25)**

The following documents or copies thereof belonging to the respective aircraft are to be carried on each individual flight:

- a. Certificate of Registration.
- b. Certificate of Airworthiness.
- c. Aircraft Flight and Maintenance Log book.
- d. Aircraft Aeronautical Station License.
- e. Noise certificate.(As Appropriate)
- f. The appropriate licenses for each member of the flight crew.
- g. Copy of the return to service, if any, in force with respect to the aircraft, or technical log, as applicable.
- h. For international flights, a copy of the notified procedures to be followed by the pilot-in-command of an intercepted aircraft, and the notified visual signals for use by intercepting and intercepted aircraft.
- i. Certified true copy of Air Operator Certificate and a copy of Operation Specifications relevant to the aircraft type
- j. Passenger and cargo manifests.
- k. Copy of aircraft insurance.
- l. A current weight and balance document.

### **8.11.2. Manuals to Be Carried**

The following Manuals are to be carried on each flight;

- a. The current Operations Manual Part A.
- b. The current Pilots Operation Handbook.
- c. The current Normal, Abnormal and Emergency checklist for the relevant aircraft type and model.
- d. Minimum Equipment List
- e. Operations Manual Part B - Standard Operating Procedures for each aircraft type

### **8.11.3. Additional Information and Forms to Be Carried**

In addition to the above the following information and forms, relevant to the type and area of operation, are to be carried on each flight:

- a. Operational Flight Plan
- b. Flight Release Form
- c. Details of the filed ATS flight plan;
- d. Appropriate NOTAM/AIS briefing documentation;
- e. Appropriate meteorological information;
- f. Notification of special categories of passenger such as security personnel, if not considered as crew, handicapped persons, inadmissible passengers, deportees and persons in custody;
- g. Notification of special loads (NOTOC)written information to the PIC;
- h. Current maps and charts and associated documents;

- i. Any other documentation which may be required by the Authority concerned with the flight, such as cargo manifest, passenger manifest etc.; and
- j. Forms to comply with the reporting requirements of the Authority and the operator.
- k. Carrying CMM and required manual for maintenance purpose when no maintenance representative is appointed at destination.
- l. Company operations and ground handling frequencies.
- m. Search and rescue information

#### **8.11.4. Engine Inoperative Landing Report (CASR 135.565)**

- a. The Smart Cakrawala Aviation pilot in command shall report the failure or shut down of the engine to the appropriate ground radio station as soon as practicable and shall keep that station fully informed of the progress of the flight. Whenever an engine of an aircraft fails, or intentionally shut down to prevent possible damage, the pilot in command shall land at the nearest suitable airport.
- b. Where the Pilot in Command elects to land at an airport other than the nearest suitable airport, he shall submit a written report to Operation Manager, stating his reasons for not proceeding to the nearest suitable aerodrome. The Operation Manager shall, within 10 days after the pilot returns to his home base, send a copy of this report with his comments to the DGCA.

## **8.12. ATC FLIGHT PLAN**

Flights are normally operated on an instrument flight plan. For safety reasons, the ATC must be informed of the expected operation before each flight, an ATC flight plan must to be filled

for each flight and special procedures or maneuverability limitation must be indicated.

### **8.12.1. Filling ATC Flight Plan**

The operation staff (authorized person) on duty or if not the flight crew has in charge to file the ATC Flight Plan and request a slot departure when needed.

A copy of the accepted ATC Flight Plan with, any modifications to the filed flight plan, must be given to the commander and be carried aboard. Another copy must be kept at the operations department.

Parts of the ATC flight plan to be filled by cockpit crew are as follows:

- ATC clearance received during start up
- Actual takeoff weight, actual landing weight, actual zero fuel weight
- Take off alternates (coordinating with the OCC)
- Fuel onboard
- Actual time of departure (take off time), actual time of arrival (landing time)
- Departure and Arrival ATIS
- Actual time of overhead and actual fuel burn

### **8.12.2. Pilot and ATC Agreement**

A clearance issued by ATC and accepted by a pilot constitutes an agreement between ATC and the commander as to the planned execution of the flight.

This agreement is the current flight plan, whether or not it is the same as the originally filed flight plan.

If at any point after take-off the commander wishes to change the flight plan, he must request the change and obtain the concurrence of ATC in the form of an amended clearance. Likewise, ATC may initiate an amended clearance for traffic requirement and if concurrence between the commander and an ATC controller is not possible, the flight is continued under the emergency authority of the PIC.

Any request for an amended clearance should be made considering traffic and the planning and coordination requirements of the ATC. A pilot must not accept a clearance with which he cannot safely comply or which exceeds the capabilities of the aircraft. The PIC is the final authority as to the operation of the aircraft; he is directly responsible for the operation of the aircraft. An ATCC clearance is not an authorization for a pilot to deviate from any regulation or to conduct an unsafe operation. If, due to severe weather, an immediate deviation is required, the pilot's emergency authority will be exercised. A pilot should question any clearance or any part of a clearance that he does not understand.

### **8.12.3. ATC Clearance**

No flight requiring an ATC clearance shall commence take-off without such clearance.

All ATC clearances and altimeter settings shall be read back including the full call sign. Standard phraseology shall be used and the wording shall be clear, precise and unmistakable. A written record shall be made of the initial airway clearance and any significant re-clearance. The PIC is responsible to ensure that Clearances received are safe with respect to terrain clearance during climb/descent and en-route; and Compliance with the provisions of a clearance will not involve violation of other regulations governing the flight.

#### **ACCEPTANCE & READ-BACK OF ATC CLEARANCE**

In all cases ATC clearance must be read back by cockpit crew for the acceptance purpose.

Minimum under following conditions, to avoid misunderstanding of ATC clearance both pilot crew members are required to confirm ATC clearance:

- in areas of high terrain and/ or
- that include heading, flight level, frequency, route/waypoint changes
- that include instructions for holding short of a runway

#### **CLEARANCE LIMITS**

An ATC clearance issued before take-off normally includes the destination airport as the clearance limit. A flight may be cleared to a point short of the destination if ATC has no assurance that coordination with a subsequent area control center will be accomplished before that flight enters its FIR.

A flight must not continue beyond its clearance limit without further clearance. It is the controller's responsibility to furnish further clearance before a flight reaches the clearance limit. This clearance may change the clearance limit to a point beyond or it may include holding instruction at the clearance limit. In the latter case the controller should provide the pilot with an expected further clearance time.

#### **DEPARTURE PROCEDURE**

The departure includes the routing and any altitude restrictions during after take-off to the en-route phase.

At some airports, Standard Instrument Departures (SID) have been established which identify each departure procedure with a name and a number. At airports where they are used, these SIDs are charted and used routinely to simplify and shorten clearance delivery. For an airport's SID, see AIP Charts Manual. A pilot is to accept a SID as part of the ATC clearance only if the SID number in the clearance corresponds with his charted information.

#### **ROUTE OF FLIGHT**

If the route of flight is different from that filed, or if the flight is an oceanic flight, or if a clearance is issued en-route, the clearance must include a description of the route using airway designations, radio fixes, or latitude and longitude.



When ATC includes the Mach number as part of the clearance, that Mach number must be maintained as closely as possible, any change in Mach number must be approved by ATC.

Additionally, ETA amendments and/or TAS changes, must be reported to ATC.

### **ALTITUDE**

A cleared altitude means an assigned altitude or flight level including any restrictions. A new clearance is required to leave that altitude or flight level. At airport without an approved instrument approach procedure, the destination clearance authorizes the pilot to proceed to the destination airport, descend, and land. The clearance does not permit the pilot to descent below the MEA or MOCA unless the descent and landing are made in accordance with Visual reference Flight Rules.

In some part of the world, altitude clearances are based on separation from known air traffic and may not provide separation from terrain and obstructions. The commander is responsible for ensuring that any clearance issued by ATC provides terrain and obstruction separation. Upon receiving a clearance containing altitude information, the commander must verify that the clearance does not violate any altitude, restriction for the route to be flown.

### **HOLDING INSTRUCTIONS**

If a flight is cleared to hold, ATC holding instructions must be complied with. These instructions may be issued by the controller or they may be required on the charts.

### **ARRIVAL ROUTE**

Clearance for an arrival route is not issued until a flight is approaching the terminal area. This is a detailed clearance that fully describes the routing to a point from which the flight will be maneuvered for the approach to the airport.

At some airports, Standard Terminal Arrival Routes (STAR) have been established.

They identify each airport arrival route with a name and a number. STARs are charted and used routinely to simplify and shorten clearance delivery. For airport's STAR, see AIP. A pilot is to accept a STAR as part of the ATC re clearance only if the STAR number in the clearance corresponds with his charted information.

### **COMMUNICATIONS**

The frequency of departure control or the next en-route facility may be included with the clearance.

### **APPROACH CLEARANCE**

An approach clearance is authorization to conduct an approach and missed approach. If the type of approach is not specified, the pilot may execute any type of instrument approved for the runway to be used. In this case, the pilot must announce, his intended chooses of approach procedure. An approach clearance does not include clearance to land.



#### **8.12.4. Complying With a Clearance**

When ATC issues a clearance, a pilot is expected to comply promptly after acceptance. ATC may use the term "immediate" to communicate urgency and the requirement for expeditious compliance.

## **8.13. OPERATIONAL FLIGHT PLAN (135.601)**

Before each flight an Operational Flight Plan (OFP) must be prepared by operation staff (authorized person) or by the flight crew.

It is normally obtained through a computerized process.

The operational flight plan provides the flight crew with necessary information to perform the flight. This includes the route, distances, timing, flight levels, aircraft weights, emergency situations and minimum flight altitudes.

The operational flight plan must be checked by the flight crew and approved by the PIC before the departure. Amendments due to flight crew requirements, ATC clearance or limitations such as aircraft (MEL) Minimum Equipment List or (CDL) Configuration Deviation list items, may require the operational flight plan be updated by the flight crew.

OFP's shall always be prepared in duplicate and signed by the PIC. For OFP which prepared by a operation staff (authorized person), must show the name of the operation staff (authorized person).

The copy of the OFP remains on ground with the operation staff (authorized person) or at the station, whichever is applicable, whilst the original will be filed with the operational return documents after the flight or series of flights is completed by that crew.

The operational flight plan will be calculated with updated performance of the aircraft, ATC cleared route, the weather forecast on the route and the actual aircraft weights.

The following information is to be recorded for VFR OFP:

1. Air Operator's name; - Smart Cakrawala Aviation.
2. Date;
3. Aircraft registration;
4. Aircraft types and models (as applicable);
5. Type of flight;
6. Crew names, rank and assigned position;
7. Departure aerodrome;
8. destination aerodrome;
9. Minimum fuel as applicable for the type of flight plan including;
  - a. taxi,
  - b. trip to destination,
  - c. alternate (as applicable),
  - d. holding / reserves;
10. Operational weight and balance and load control including;
  - a. aircraft basic weight,
  - b. total payload broken down into passenger and cargo weights and distribution on board that aircraft,
  - c. total fuel on board at brake release,
11. Planned maximum takeoff weight, and where the determination of aircraft trim position requires centre of gravity(c of g) position, the c of g position,

12. Signature of pilot in command and as applicable, certifying the accuracy and acceptance of the OFP

13. Number of persons on board: crew and passengers, as amended by final load figures.

Items which are readily available in other documentation or from an acceptable source or are irrelevant to the type of operation may be omitted from the operational flight plan.

All entries on the operational flight plan are to be made concurrently and be permanent in nature.

## **8.14. AIRCRAFT FLIGHT AND MAINTENANCE LOG(CASR 135.701)**

The aircraft technical log (log book) is the legal medium for written communication between flight crews and maintenance personnel.

The aircraft technical log is a system for recording defects and malfunctions discovered during the operation and for recording details of all maintenance carried out on the particular aircraft to which the aircraft technical log applies whilst that aircraft is operating between scheduled visits to the base maintenance facility.

In addition, it is used for recording operating information relevant to flight safety and must contain maintenance data that the operating crew needs to know.

Aircraft Flight and Maintenance log includes 2 (two) portions, Flight information and Maintenance Information.

a. Flight information will be used by pilots to record daily operation activity. This log book will record the following but not limited to record:

1. aircraft registration and nationality;
2. date;
3. crew member names and duty assignments;
4. departure and arrival points and times;
5. purpose of flight private, aerial work, scheduled or non-scheduled
6. observations regarding the flight; and
7. Signature of the pilot-in-command

b. Maintenance information will record defects and malfunctions discovered during the operation and for recording details of all maintenance carried out on the particular aircraft to which the aircraft flight maintenance log applies whilst that aircraft is operating between scheduled visits to the base maintenance facility. In addition, it is used for recording operating information relevant to flight safety and must contain maintenance data that the operating crew needs to know.

The pilot in command shall ensure that all mechanical defects and irregularities occurring during flight time are entered in the maintenance log of the aircraft at the end of that flight time. Before each flight the pilot in command shall ascertain the status of each defect or irregularity entered in the log at the end of the preceding flight. For further details see Company Maintenance Manual.

Smart Cakrawala Aviation policy requires PIC to fill in all the information require on the AFML or delegate it to the First Officer. The best convinient time to fill in an AFML is when the flight has reached cruise phase. Some item on the AFML such as engine starting data or engine parameter reading during takeoff can be written on a scrab paper for later being move into the AFML.

Used AFML will be kept in the maintenance library for record of history of the aircraft.

## **8.15. USE OF CREW/PASSENGER SAFETY BELTS/HARNESSES**

### **8.15.1. Crew**

During take-off and landing, and whenever the PIC considers it necessary in the interests of safety, crew members shall be at their assigned crew stations, properly secured by the safety belts and harnesses provided.

During other phases of the flight, each flight crew member in the cockpit shall keep his harness fastened while at his station.

### **8.15.2. Passengers**

The PIC shall ensure that each person on board is briefed before take-off on how to fasten and unfasten his safety belt/harness.

For all phases of flight, during taxi, and on the ground while before start engine and whenever he considers it necessary in the interests of safety, the PIC shall ensure that each passenger on board occupies a seat with his safety belt/harness properly secured.

Multiple occupancy of seats is permitted for any child aged 2 (two) or less accompany with their parents. The child will be seated on their parents laps and using the seat belts together.

At each unoccupied seat, the safety belt must be secured so does not to interfere with crewmembers in the performance of their duties or with the rapid egress of occupants in an emergency situation.

## **8.16. FLIGHT CREWMEMBERS AT THE CONTROLS (CASR 135.543)**

Flight crew members are to occupy their assigned duty stations from the time the aircraft first starts to move at the beginning of its flight until it is established in the level cruise, and from the time it begins its descent on approaching the destination until the aircraft is stationary at the end of the flight.

Smart Cakrawala Aviation shall not assign, and no crewmember shall perform, any duties during a flight time, except those duties that relate to the safe and efficient operation of the aircraft, or, passenger safety.

No flight crewmember may engage in, nor may any pilot in command permit, any activity during a critical phase of flight which could distract any flight crewmember from the performance of his or her duties or which could interfere in any way with the proper conduct of those duties.

- Smart Cakrawala Aviation pilot will not permit, during critical phases of flight, any activity in the cockpit that could distract a flight crewmember from, or interfere with in the proper and diligent performance of his or her duties. Activities such as eating meals, engaging in nonessential conversations within the cockpit, nonessential communications between the cockpit crews and passenger, and reading publications not related to the proper conduct of the flight are not required for the safe operation of the aircraft.
- Each flight crewmember on flight deck duty, shall remain in his or her seat, with their seat belt and shoulder harness fastened;
  1. While the aircraft is taking off or landing, and
  2. Any time the PIC has turned on the fasten seat belt sign on, due to turbulence or
  3. other safety consideration.
- A required Smart Cakrawala Aviation flight crews are not allowed to leave the assigned seat during all phase of flight.

Smart Cakrawala Aviation policy state that PIC will be acting as Pilot Flying for all flight into remote airport (Group 3 and 4 airport). Except for Captaincy training, the Instructor as a PIC delegate the duty of PIC to the captain trainee. The SIC or First Officer is allowed acting as Pilot Flying for flight into Group 1 and Group 2 airport and after PIC delegates the duty.

### **8.16.1. Aircraft Movement in the Aerodrome Area**

Smart Cakrawala Aviation crewmembers will not taxi any airplane on the movement area of an aerodrome unless;

1. The person at the controls is an appropriately qualified pilot or;
2. Has been duly authorized by Operation Manager of Smart Cakrawala Aviation;
3. Is fully competent to taxi the airplane;
4. Is qualified to use the radio if radio communications are required; and Has received instruction from a competent person in respect of aerodrome layout, and where appropriate, information on routes, signs, marking, lights, ATC signals and instructions, phraseology and procedures

- 
5. and is able to conform to the operational standards required for safe airplane movement at the aerodrome.



## **8.17. DISCREPANCY / MECHANICAL DIFFICULTIES REPORTING**

- a. The pilot in command, or second in command at the pilot in command's discretion, shall note the condition of the aircraft in the aircraft logbook upon completion of each flight.
- b. If mechanical irregularities are noted in the logbook, discrepancies shall be legibly printed on the correct section of the daily flight log page (s). Logbook entries shall be described with enough detail to ensure that maintenance personnel understand what the pilot (s) meant.
- c. A mechanical irregularity description may be written on as many lines in the logbook as required to describe the problem. However, no more than one irregularity may be written on any one line. This allows space for maintenance personnel to sign-off irregularities after work on the aircraft has been completed.

When required additional information shall be added to the discrepancy write-up to assist technicians in diagnosing the problem (s). This additional information could include:

1. The gross weight of the aircraft;
  2. The flight configuration of the aircraft (e.g., approach, takeoff, cruise, etc.);
  3. The weather conditions (e.g., gusty winds, rain, high temperature, etc.);
  4. The altitude of the aircraft when the irregularity occurred; and
  5. Other pertinent data observed by the pilot or other crewmember
- d. If a mechanical irregularity was noted in the logbook, the pilot in command will personally notify a company mechanic so that the deficiency can be corrected as soon as possible.

With or without verbal notification, all mechanical irregularities shall be written on the appropriate logbook page by the pilot.

- e. If a mechanical difficulty is discovered after push back or during taxi but before takeoff, the pilot in command should refer to the MEL/CDL, "O" and "M" without raising a Deferred Maintenance Item (DMI).

## **8.18. AIRPLANE PERFORMANCE OPERATING LIMITATIONS**

### **8.18.1. General**

Performance is apart from the airworthiness requirements. Together with associated operational rules they are intended to ensure a satisfactory safety level in civil aviation as far as performance of the aircraft concerned.

Operating of PT. Smart Cakrawala Aviation's aircraft is covered by the standards promulgated in the CASR 135 Subpart I.

Smart Cakrawala Aviation flight crew shall refer to appropriate Pilots Operation Handbook or SOP.

### **8.18.2. Minimum Altitude Use of Auto Pilot (CASR 135.579)**

#### **En-route Operations**

No person may use in autopilot for take-off, en-route, including climb and descent, at

an above the terrain that is less than twice the maximum altitude loss specified in the Airplane Flight Manual for a malfunction of the autopilot under cruise conditions, or less than 500 feet whichever is higher.

#### **Approaches**

when using an instrument approach facility, no person may use an autopilot at an altitude above the terrain that is less than twice the maximum altitude loss specified in the Airplane Flight Manual for a malfunction of the autopilot under approach conditions or less than 50 feet below the approved minimum descent altitude or decision height for the facility, whichever is higher, except:

- a. No Pilot may use an autopilot with an approach coupler for ILS, approaches at an altitude above the terrain that is less is than 50 feet higher than the maximum altitude loss specified in the Airplane Flight Manual for the malfunction of the autopilot with approach coupler under approach conditions, and
- b. No Pilot may use an autopilot with an approach coupler for ILS, approaches at an altitude above the terrain that is less is than the maximum altitude loss specified in the Airplane Flight Manual for the malfunction of the autopilot with approach coupler under approach conditions, or 50 feet, whichever is higher.

The Director issues operations specifications to allow the use to touchdown of an approved flight control guidance system with automatic capability, in any case in which:

1. The system does not contain any altitude loss (Above zero) specified in the Airplane Flight Manual for malfunction of the autopilot with approach coupler, and
2. The use of the system to touchdown will not otherwise affect the safety standards.
3. Company Standard for Visual Approach is down to 500 feet AGL

## **8.19. WEATHER REPORTS AND FORECASTS**

### **8.19.1. Pilot in Command Responsibility**

- a. Whenever a pilot in command is responsible for obtaining a weather report or forecast, the pilot in command shall use a DGCA-approved weather service. However, for operations under VFR, the pilot in command may, if such a report is not available, use weather information based on that pilot's own observations or on those of other sources competent to supply appropriate observations. These sources include:
  - (1) The Flight Operations Office (FLOPS) by SSB radio; or
  - (2) Communications with other pilots; or
  - (3) Persons competent to supply appropriate observations at the aircraft's destination(s) contacted by telephone or radio.
- b. Should flight operations be conducted from a airport landing area where weather information is not available, the pilot in command may, in VFR weather conditions, depart that area based upon his own observations.

### **8.19.2. Weather Briefing Contents**

Regardless of how or from where a weather briefing is received, it should contain the

following, minimum information:

1. Adverse weather;
2. Synopsis of current weather;
3. SIGMETs;
4. En-route forecast and en-route terminal weather;
5. Destination forecast and current terminal weather;
6. Departure forecast and current terminal weather;
7. Alternate destination (if applicable) forecast and current weather terminal;
8. NOTAM information.

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## **8.20. REPORTING POTENTIALLY HAZARDOUS WEATHER CONDITIONS AND IRREGULARITIES OF COMMUNICATIONS OR NAVIGATION FACILITIES (CASR 135.561)**

Whenever a Smart Cakrawala Aviation pilot encounters a potentially hazardous weather condition or an irregularity in a ground communications or navigation facility in flight, the knowledge of which the pilot considers essential to the safety of other flights, the Smart Cakrawala Aviation pilot shall notify an appropriate ground station as soon as practicable.

## **8.21. RESTRICTION OR SUSPENSION OF OPERATIONS: CONTINUATION OF A FLIGHT IN AN EMERGENCY (CASR 135.555)**

- a. If, during flight operations, a Pilot In Command learns of a condition hazardous to his flight, the pilot in command shall restrict or suspend operations as necessary until the hazardous condition is corrected.
- b. Smart Cakrawala Aviation pilot will not allow a flight to continue toward any airport or point of intended landing under the conditions explained in Paragraph (a) unless:
  1. in the opinion of the pilot in command, the hazardous condition — including hazardous airport or runway conditions — may reasonably be expected to be corrected by the aircraft's estimated time of arrival (ETA).
  2. An alternate airport to which the aircraft can divert to from any point along the route, maintaining required reserve and contingency fuel at all times
  3. If the hazardous condition will not be corrected by the aircraft's ETA, and the pilot must continue toward that destination, the continuation toward that airport shall be considered a distress or urgency situation.

## **8.22. CREW MEMBER REQUIREMENTS: POSSESSION OF EXTRA CORRECTING LENSES (CASR 91.14)**

Any Flight crew members who are required to wear eyeglasses or contact lenses shall have a spare set of suitable correcting lenses readily available when exercising the privileges of any DGCA-issued license for which he was assessed medically fit subject to wearing suitable correcting lenses.

## **8.23. PROHIBITION AGAINST INTERFERENCE WITH CREWMEMBERS (CASR 91.11)**

No person may assault, threaten, intimidate, or interfere with a crewmember in the performance of the crewmember's duties aboard an aircraft being operated. The Pilot-in-Command shall submit, without delay, a report of such an act of unlawful interference to the DGCA.

## **8.24. AIRCRAFT OVERWATER OPERATIONS**

### **8.24.1. Airplane (landplanes)Overwater Operation**

- a. Smart Cakrawala Aviation Airplane operation shall carry one life jacket or equivalent individual flotation device for each person on board, stowed in a position easily accessible from the seat or berth. when conduct extended over water
- b. Smart Cakrawala Aviation airplanes when used over routes on which the airplane may be over water and at more than a distance corresponding to 30 minutes or 50NM, whichever is the lesser, shall be equipped with:
  1. life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency, provided with such lifesaving equipment including means of sustaining life as is appropriate to the flight to be undertaken; and
  2. equipment for making the pyrotechnical distress.

### **8.24.2. Helicopter Overwater Operation**

PT Smart Cakrawala Aviation helicopters intended to be flown over water shall be fitted with a permanent or rapidly deployable means of flotation so as to ensure a safe ditching of the helicopter when:

- (1) engaged in offshore operations, or other overwater operations as determined by Director General; or
- (2) flying over water at a distance from land corresponding to more than 10 minutes at normal cruise speed when helicopter operating in performance Category A; or
- (3) flying over water beyond auto rotational or safe forced landing distance from land when operating in performance Category B.

PT Smart Cakrawala Aviation helicopters shall be equipped with:

- (1) one life jacket or equivalent individual flotation device with a means of electric illumination for the purpose of facilitating the location of persons, for each person on board, stowed in a position easily accessible from the seat of the person for whose use it is provided. For offshore operations the life jacket shall be worn constantly unless the occupant is wearing an integrated survival suit that includes the functionality of the lifejacket;
- (2) life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency, provided with such life-saving equipment including means of sustaining life as is appropriate to the flight to be undertaken; and
- (3) equipment for making the pyrotechnical distress signals.



## **8.25. Flights over Uninhabited Terrain**

PT Smart Cakrawala Aviation will not conduct operations over an uninhabited area or any other area that (in its operations specifications) the Director General specifies required equipment for search and rescue in case of an emergency, Unless the aircraft has the following equipment:

- (1) Suitable pyrotechnic and reflective signaling devices. Such reflective devices must have a means of aiming the device at the intended target;
- (2) Two approved survival type emergency locator transmitter, one of which shall be automatic. Batteries used in these transmitters must be replaced (or recharged, if the battery is rechargeable) when the transmitters has been in use for more than 1 cumulative hour, or when 50 percent of their useful life (or for rechargeable batteries, 50 percent of their useful life of charge) has expired, as established by the transmitter manufacturer under its approval. The new expiration date for replacing (or recharging) the battery must be legibly marked on the outside of the transmitters. The battery useful life (or useful life of charge) requirements of this paragraph do not apply to batteries (such as water activated batteries) that are essentially unaffected during probable storage intervals;
- (3) Enough survival kits, appropriately equipped for the route to be flown for the number of occupants of the aircraft; and
- (4) Portable radio transmitter of a type approved by the Director General for the operation being undertaken.
- (5) Please See SOP Mountainous Manual.



# OPERATION MANUAL

## PART A GENERAL

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## **9. GROUND HANDLING PROCEDURES**

### **9.1. FUELLING PROCEDURES**

#### **9.1.1. Introduction**

Normally refueling will be carried out without passengers on board the aircraft, with the engines stopped, and all equipment switched off. Circumstances may arise, however, when the PIC considers it preferable for the passengers to remain on board while refueling takes place, e.g.:

1. When the technical stop is solely for purpose of refueling;
2. The aircraft is parked remote from the terminal building;
3. The weather is inclement and surface transport is not readily available for the passengers.

The precautions to be taken during refueling are given in the following paragraphs.

#### **9.1.2. Safety Precautions during Fueling / Defueling**

Engineer or the flight crew, as appropriate, shall supervise the fueling process, and ensure adherence to the following safety precautions:

- a. No smoking within 20 m (65 ft) of the aero plane, unless local regulations demand a wider safety area;
- b. Fuel hoses shall be positioned by the shortest way to the fuel inlets; a sufficient safety distance shall be kept from wheel-brakes (at least 1 m) and from the APU air-inlet/ outlet as applicable;
- c. Bonding connections from the fueling truck to the aero plane must be established to discharge any static electricity before fuel hoses are connected;
- d. Vehicles, except fuel trucks, shall not be positioned within the venting areas;
- e. Rip cords, where installed, must be ready for use, dead man controls, if available, must be employed;
- f. Spilled fuel shall be removed or dried up immediately, in the presence of the fire brigade, before passengers are boarded;
- g. In case of over wing fueling, ground and/ or aero plane auxiliary power units shall be connected and switched on before commencement of fueling/ defueling, and shall not be switched off or disconnected until fueling/ defueling is terminated; no electrical switch on the aero plane or on the ground power unit shall be operated whilst over wing fueling is in progress, except such switches necessary for fueling;
- h. During pressure fueling, electrical and/ or electronic systems may be operated as far as required during preflight activities, except weather radar and microphone buttons on HF.
- i. During thunderstorms, fueling/ defueling is strictly prohibited.

**Note:**

- a. Fueling is considered to start as soon as fuel hoses connected to the aero plane are pressurized. Fueling or defueling shall only be considered terminated after all fuel hoses have been disconnected from the aero plane;

- b. With a thunderstorm in the immediate vicinity of the aerodrome, fueling shall be interrupted unless the Commander and the personnel concerned have agreed on a different course of action.
- c. Refuel with passenger onboard is not allowed

## **9.1.3. Precautions to Be Taken to Avoid Fuel Contamination and Ensure the Required Amount of Fuel is Loaded**

To avoid fuel contamination and to ensure the required amount fuel is loaded, prior

to beginning the fueling process Smart Cakrawala Aviation personnel will:

- Check fuel drains for any contamination, sediment, or water;
- Obtain a fuel sample from refueling nozzle in clean glass container and check that fuel is clear and free from suspended matter, sediment, and water.

The following method will be used to check the refueling figure:

- a. Check that the fuel meter or zeroed before refueling.
- b. Uplift as required.
- c. Check cockpit gauges or use the fuel tank dipstick for proper fuel load.

## **9.1.4. Prior to Fueling from Drums**

Check the fuel drum markings to ensure the proper type of fuel is being dispensed and that the fuel has not expired.

- a. Ensure drum seals are intact;
- b. Place drums in position and allow settling for at least 30 minutes prior to uplift;
- c. Ensure pumping equipment is serviceable,
- d. Thoroughly flush pumping equipment with clean fuel;
- e. If using a funnel:
  - Before use, the funnel elements must be rinsed with fuel and put correctly in position;
  - The funnel must be bonded to the aircraft and the delivery nozzle bonded to the funnel;
  - A decrease in the rate of fueling could indicate element blockage, which must be investigated.

## **9.1.5. Rotors Running Refueling**

- a) If the presence of fuel vapor is detected inside the aircraft, or any other hazard arises, refueling/defueling must be stopped immediately.
- b) Firefighting facilities of the appropriate scale shall be positioned to be immediately available
- c) Heater, radar, transponder, DME must be switched to off/standby; No radio transmissions shall be made from the aircraft or in the vicinity of the aircraft (HLO); No electrical switches may be activated;

**Caution:** When excessive fuel is spilled, refueling must be stopped and the spilled fuel removed before continuing.

**Note:** Refueling with engines/propellers/rotors running at airports is governed by local regulations.

## **9.2. PASSENGER AND CARGO HANDLING PROCEDURES RELATED TO SAFETY**

All personnel who are to be made responsible for ground handling of the Company's aircraft, including the loading and offloading of both passengers and freight, are to be given detailed guidance in the completion of their duties in respect of each aircraft type for which they may be responsible. Such personnel include flight crews, and the Company's own ground personnel. In the event of usage of non-Company ground personnel, it is the responsibility of the PIC to ensure that those personnel are adequately briefed.

### **9.2.1. Passengers**

- a. There may be a wide variation in the circumstances in which passengers are accepted and conveyed to an aircraft, depending on the place of departure, the type of aircraft and its crew composition, the use of a check-in desk or rendezvous point, the availability of a courtesy vehicle and the proximity of the parked aircraft to the exit from the terminal building. Irrespective of the circumstances however, passengers are to be either taken to the aircraft in approved transport, or escorted by a crew member, nominated Company employee or representative of the appointed handling agent, as appropriate, from the terminal building to the aircraft.
- b. Once the passengers are seated, the engineer onboard or a flight crew member is to close the aircraft door(s) and/or confirm by inspection that it has been properly closed and secured. Passengers are restricted to those parts of the aircraft that are designated for passengers. Temporary access may be granted by the PIC for the purpose of taking action necessary for the safety of the aircraft, any person or goods therein.
- c. Passengers must be seated where, in the event that an emergency evacuation is required, they will be able to assist and not hinder evacuation from the aircraft.
- d. If the Company is required to carry such normally inadmissible passengers as deportees or persons charged with criminal offences, special arrangements, including the provision of escorts will be made and full details will be included in the PIC's flight brief.
- e. In addition to having their attention drawn to the safety cards, passengers are to be carefully briefed on their contents. Emphasis should be placed on the operation of the normal/emergency exits, the use of safety belts/harnesses, the position of seat backs during take-off and landing, and the general requirements for cabin safety security at all times.

### **9.2.2. Seat Allocation**

Smart Cakrawala Aviation pilots shall ensure, on the aircraft to be operated there are available, during the takeoff, en route flight, and landing:

1. An approved seat for each person onboard the aircraft who has reached his or her second birthday; and

2. An approved safety belt for separate uses by each person onboard the aircraft infant.
3. Smart Cakrawala Aviation does not assign individual seat assignments and passengers may sit in any approved seat as directed by Smart Cakrawala Aviation staff and in accordance with the OFP and weight and balance load plan.

Except as provided in this paragraph, each person onboard the Smart Cakrawala Aviation aircraft shall occupy an approved seat or berth with a separate safety belt properly

secured about him or her during movement on the surface, and in flight.

Notwithstanding the preceding requirements, a child may:

1. Be held by an adult who is occupying an approved seat if that child is not yet two years old; or
2. Occupy an approved seat, provided that:
  - a. The child is accompanied by a parent, guardian, or attendant designated by the child's parent or guardian to care for the safety of the child during the flight; and
  - b. Complies with the following requirements:
    - The restraint system must be properly secured to an approved forward facing seat or berth; and
    - The child must be properly secured in the restraint system and must not exceed the specified weight limit of the restraint system.

Seats and seat belts are provided for each passenger, and crewmember should ensure that passengers and other occupants are seated with seat belts securely fastened, including shoulder harnesses if available. Seat belt signs should be turned on as appropriate in aircraft so equipped.

Improvised seats and seat belts may be dangerous and should not be allowed, passengers are suggested to keep their seat belts fasten in flight.

The number of passengers must be in accordance with aircraft configuration.

In case number of passenger exceeding the number aircraft configuration, the passenger and his/her checked baggage must be offloaded.

### **9.2.3. Responsibility for Acceptance**

The Smart Cakrawala Aviation Pilot in Command has the ultimate responsibility for all persons on board the aircraft with any matters related to cabin safety. The Pilot in Command has the final authority to determine whether or not an article will be accepted as carry-on baggage.

The Pilot in Command is the final assessment of carry-on baggage acceptance during passenger boarding and prior to flight departure.

### **9.2.4. Safety on Aircraft Ramp**

#### **General Precautions - Personal Safety Measures**

While engaged in activities on the ramp all Smart Cakrawala Aviation employees shall wear a high visibility safety vest and display their security badges.

- No unauthorized persons may enter the ramp;

- Smoking and the use of open flames is strictly prohibited;
- Ramp surfaces must be frequently checked to prevent accidents caused by slipping/skidding on slippery surfaces, and to prevent trip hazards; such checks also serve to detect foreign objects on the ramp surfaces which must be removed in order to prevent foreign object damage to the tires and other parts of the airplane, and to preclude possible ingestion by an engine;
- Ramp personnel should use ear protection
- Company ground handling staff or other personnel authorized by the company must ensure that the security zones around the suction and blast areas of the aircraft are observed and that no personnel or equipment are within such zones when the signals for engine startup are given;

## **Passenger Handling and Equipment Movement on the Ramp**

During passenger movement to and from the aircraft and while on the ramp, all Smart Cakrawala Aviation personnel shall monitor and direct the movement of passengers, baggage and cargo so as to not create a hazard to persons, property, the aircraft or any equipment.

During boarding Smart Cakrawala Aviation will make sure that:

- A Safety cone is placed to guard the engine area if required.
- A Portable fire extinguisher and qualified personnel are available near the aircraft,
- The PIC or a Smart Cakrawala Aviation ground staff member will stand near the passenger boarding door;
- During engine start no ground equipment is located in close proximity to or behind the aircraft except for portable starting battery (if starting using external power).
- If passengers are embarking the aircraft using a transport bus then the ground handling staff will escort the passengers until near the aircraft then continue guiding them to the aircraft door.
- If the passengers are embarking by walking to the aircraft then several ground handling staff members will escort and guard the passengers while crossing the apron.

### **9.2.5. Passenger Handling**

When Smart Cakrawala Aviation passengers embarking to the aircraft using transport bus then the ground handling staff will escort the passenger until near the aircraft then continue with walking to the aircraft door. If the passengers embarking by walking to the aircraft then several ground handling staff will escort and guard the passengers during crossing the apron.

Smart Cakrawala Aviation is accommodating the passengers with a free seating configuration.

Mother with infant must sit together. Mother will sit her infant on her lap and share

the seat belt together. Child passengers will be treating as an adult and sit on his/her seat alone.

## **9.2.6. Handling Sick Passengers**

Sick or injured persons should be accompanied by a suitably qualified medical attendant and the PIC must be briefed on the nature of illness/injury and what, if any, special considerations or risks exist.

Mentally disturbed patients or those under sedation must be accompanied by a qualified medical attendant and at least one additional attendant who may be a suitably briefed passenger.

Prior to take-off the PIC must be satisfied that such attendants are sufficient in number and individual strength to restrain the mentally disturbed / sedated person

and that irrespective of the nature of the illness or injury sufficient attendants /passengers are on board and suitably briefed to effect the rapid evacuation of the patient without hindrance to other passengers who may be on board.

If during flight, medical attention is advisable, the Commander shall notify the next station ahead in order to have a physician available upon arrival, giving sufficient particulars regarding the nature of the illness or injuries to guide the physician in making any decisions with regard to the provision of an ambulance, hospitalization, etc.

Carriage of sick passenger with or without stretcher case is permitted with medical clearance obtained from the Smart Cakrawala Aviation appointed doctor or General Hospital's doctor.

Preparation on handling sick passenger;

- a. Must be mentioned in the Passenger Information Sheet (PIS).
- b. Must embark the aircraft before other passenger onboard and disembark after other passenger.
- c. Sick passenger without stretcher case must not be seated next to emergency window exit.
- d. Pay attention about possibility of oxygen use.
- e. Use the Smart Cakrawala Aviation company channel to contact the destination ground handling staff to request for an assistant or an ambulance.
- f. Only one of sick passenger requiring stretcher case and one disable passenger can be onboard of Smart Cakrawala Aviation flight.

## **9.2.7. Handling Passengers with Reduced Mobility**

Air carriers are prohibited by law from refusing carriage to a person on the grounds of disability or reduced mobility; however a carrier may refuse carriage if the size of the aircraft or its door makes embarkation or carriage physically impossible or if their carriage impedes the safety requirements.

A person with reduced mobility (PRM) is any person whose mobility is reduced due to a physical incapacity (sensory or locomotors), an intellectual deficiency, age, illness or any other cause of disability when using transport and whose situation needs special attention and the adaptation to the person's needs of services made available to all passengers.



The PRM shall be accompanied by ABP. The number of PRMs on board should not exceed the number of able-bodied persons (ABPs) carried. When dealing with a blind passenger it is best to offer them your arm to hold in order to guide them. Let the passenger take your arm. These passengers should be briefed on the location of nearest exit, call button and how to fasten and unfasten their seatbelt. When dealing with a deaf passenger speak to them directly. Use clear mouth movements in order that they might lip read.

Category	Restriction(s)	Requirement
WCHR (wheelchair – ramp)	Passenger can walk short distances and walk up or down stairs. Can walk in the cabin and is able to climb aircraft stairs alone. Assistance from/to aircraft is necessary.	Passenger should be accompanied. For long walking distances a wheelchair should be available.
WCHS (wheelchair – steps)	Passenger cannot walk up or down aircraft stairs but can walk in the cabin alone.	Passenger should be accompanied. Passenger needs a wheelchair from/to the aircraft.
WCHS (wheelchair – cabin seat)	Passenger cannot walk or stand and will be accompanied to and from their cabin seat.	Passenger should be accompanied. Passenger needs a wheelchair and special aids e.g. High loader or boarding wheelchair.
BLND (blind passenger)	Blind passenger. (only if assistance is expressly requested and prior notifications given)	Passenger should be accompanied. Individual needs will be respected.
DEAF (deaf passenger)	Deaf passenger or deaf without speech. (only if assistance is expressly requested and prior notification is given)	Passenger should be accompanied. Individual needs will be respected.
STCR (stretcher)	Passenger is on a stretcher and can only be transported this way.	Passenger will be carried to or from the aircraft by ambulance.

## **9.2.8. Passengers with Serious Infectious Illness**

In the absence of a qualified medical doctor, the Smart Cakrawala Aviation PIC should regard the following symptoms as grounds for suspecting the existence of disease of an infectious nature:

- a. Fever accompanied by prostration or perspiring or attended with glandular swelling.
- b. Any acute skin rash or eruption with or without fever.
- c. Severe diarrhea with symptoms of collapse.
- d. Jaundice accompanied by fever.
- e. Severe flu symptoms such as excessive coughing, watering eyes and sneezing.

## **9.2.9. Passengers with Serious Illness**

Passengers who are seriously ill may be carried on Smart Cakrawala Aviation aircraft. Seriously ill passengers should be accompanied by a medical professional or other personal who will attend to the needs of the ill passenger while onboard the aircraft.

The provisions of 9.2.6 above will apply, and additionally the Flight Operations staff or FOO should be contacted to prepare the proper paperwork as required by local regulations on arrive at the destination.

## **9.2.10. Expectant Mothers**

Expectant mothers may travel up to the end of their 28th week of pregnancy.

Travel after this and up to the end of the 35th week is permitted providing the passenger has a doctor's letter confirming the expected date of delivery and the health of the mother.

## **9.2.11. Permissible Size and Weight of Hand Bag**

Smart Cakrawala Aviation policy allowed passengers to carry with them 1 piece of hand baggage. The passengers hand baggage must be loaded and stowed during takeoff and landing.

The aircrafts (Grand Caravan) currently operated by Smart Cakrawala Aviation are not equipped with an under-seat restraint system or overhead racks with approved restraining devices / doors. As a result, the company does not allow all baggage (except hand baggage) to be carried in the passenger compartment.

The description of hand baggage are; One piece of soft sided cabin baggage is allowed not exceeding the dimensions including the handle, pockets and wheels that will allow it to be securely stowed completely under the seat (this dimension varies by aircraft type). The maximum weight for the above shall be not more than 5 kg. In addition to the above a passenger may carry a handbag or a laptop case.

## **9.2.12. Baggage and Cargo Handling**

All passengers baggage, other than carry-on baggage must be loaded and stowed in the aircraft baggage compartment or other area as allowed by the aircraft AFM. Smart Cakrawala Aviation aircraft are of a type that may require and allows for baggage and other cargo to be loaded in the aircraft cabin. All baggage and cargo

shall be loaded and secured in accordance with the aircraft AFM and the loading chart, OFP, and weight and balance calculation.

All baggage shall be loaded into the aircraft before passengers begin the boarding process.

#### **9.2.12.1. Baggage Allowance**

Each passenger is allowed 10kg/person of checked baggage, which is included with the standard fare. Additional baggage is allowed and is charged at the normal rate per kg.

Certain items commonly carried by passengers are not defined as “Carryon Baggage” and may be carried by the passenger in the passenger compartment.

These personal or hand-carry items must be small enough to be secured in the passenger’s hand and/or clothing pocket.

No more than one (1) personal item may be carried onboard the aircrafts, and they are as follows:

- Infant Bottle
- Inhaler
- Sandwich/small amount of food that is to be consumed onboard
- Single Non-alcoholic Beverage (no glass containers)
- Magazine or similar amount of reading material
- Small camera that can be place in a coat pocket
- Coat, hat, or similar article of clothing
- Passenger Information

Information concerning Smart Cakrawala Aviation allowable carry-on items will be provided to the passenger by the Boarding Announcements and crewmember briefing. Each passenger must comply with instructions given by crewmembers regarding compliance with this program.

#### **9.2.12.2. Special Loads**

##### **Carriage of Live Animal**

Live animals and pets are allowed to be carried onboard the aircraft provided they are properly secured in accordance with Smart Cakrawala Aviation SOP and the aircraft AFM.

All live animals shall be noted on the NOTOC as a special load.

##### **Carriage Endangered Animals Protected by Indonesian Law**

No crewmember or passenger is allowed to carry any endangered animal dead or alive on board the aircraft.

A list of endangered species of wild life animal, published by the UN Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and Indonesian Law.

##### **Carriage of Security Items and Carriage of Weapons (CASR 135.99)**

The carriage of weapons or firearms on board any Smart Cakrawala Aviation aircraft is limited to properly identified Police Officers, Military Personnel, and Prison Guards. In all cases the firearm must be unloaded and the weapon separated from the ammunition.

Other items such as knives, hatchets, swords, etc. are not permitted in the passenger cabin, they should be secured in the baggage compartment inaccessible

in flight by the passengers. If any Smart Cakrawala Aviation staff member notices a passenger with a weapon, they should immediately inform a member of the ground handling staff, or the PIC.

Smart Cakrawala Aviation policy is the aircraft and everything onboard is a peace area, neutral and non-violence, everything that may be used or may induce violence are not allowed on board.

Smart Cakrawala Aviation flight crew member will brief any person who authorized to bring firearms onboard. The brief include:

The firearm is to be carried in a locked case or bag and loaded in the baggage compartment.

- a. The firearm is to be unloaded of its ammunition.
- b. If a firearm has a bolt, the bolt is to be removed however the carriage of weapons by passengers on any aircraft is restricted as follow:
  1. Surrendered by the passengers upon check-in and tagged as "Security Items".
  2. Will be placed in the security box located in the cargo compartment. That security box is sealed by Security Seal and locked.
  3. A "Notification to Captain" (NOTOC) must be completed and the security box key is then kept by the PIC until arrival to the destination.
- c. The security box is taken by the ground staff upon arrival.

This category consists of:

- Any kind of firearm, handgun etc.
- Knives, hatches, sword, arrow etc.
- Toys or replica which similar to firearm or weapons.
- Anything that may be used as weapons (screwdrivers, scissors, etc.)

Properly identified Police Officers, Prison Guard, members of Arm Forces or Diplomatic Courier when performing a duty onboard may be permitted to have their firearms and ammunition in his/her custody, with prior written permission from Director General.

They should show ID credentials with full-face Picture, signature, and official seal of employing agency or authorizing official's signature at check in time.

It is the duty of the Ground staff to identify such person to the flight crew members.

### **9.2.12.3. Last Minute Baggage Changes**

Last Minute Changes are an inevitable part of the aircraft operation. Ground handling personnel must ensure that information pertaining to additions or removals of passengers, baggage and cargo are advised to the PIC without any delay.

The PIC will perform checks on the weight and balance effect of any change and advised Ground handling personnel if any additional action is required.

## **9.2.13. Positioning of Ground Equipment**

Smart Cakrawala Aviation shall ensure that its staff and its handling agent's staff are well trained in the operation of mobile ground equipment. Ground equipment shall not approach the aircraft until all engines have been shut down and the aircraft's parking brakes have been set or wheel chocks are in position.

Sufficient distance between ground equipment and the aircraft shall be maintained

in order to avoid damage caused by vertical movement of the aircraft during unloading, loading, refueling or defueling. Utmost care shall be taken while moving or positioning ground equipment in the aircraft's vicinity.

- Fuel hoses and connections shall never be run over by ground equipment.
  - With the exception of fuel trucks, mobile equipment shall not be positioned within the venting areas during fuelling / defueling.
  - Equipment when parked away from, or positioned at, the aircraft shall have parking brakes set.
  - Equipment approaching, maneuvering at or leaving the aircraft shall not be driven faster than at walking speed.
  - Aircrafts and pedestrians have the right of way. Equipment should never move across the path of taxiing aircrafts or of embarking/disembarking passengers.
- Personnel shall not ride on moving ground equipment.

## **9.2.14. Operational of Aircraft Doors**

Except in emergency, only Smart Cakrawala Aviation crew members, and Smart Cakrawala Aviation ground handling staff allowed to operate all aircraft doors.

All crew shall ensure that all passenger entry doors of the aircraft are closed from the moment of preparation for starting the engine until engine shutdown or as instructed by the PIC.

All doors and seat belts should be secured prior to take-off and landing.

### **9.2.14.1. Parking Security**

#### **General Security Procedures**

If Smart Cakrawala Aviation aircraft are unattended during a turn around, the aircraft must be protected from unauthorized access by airport ground personnel, or being exposed to jet blast or prop wash from other aircraft. It is the crew member's responsibility to close and secure all aircraft doors and cowlings.

If any unauthorized person (s) are believed to have accessed the aircraft or found in the immediate vicinity of the aircraft, Smart Cakrawala Aviation Operations and the PIC must be informed prior to departure as to assess the level of security check to be employed prior to departure.

#### **Night Stops**

If the aircraft is parked for a night stop or otherwise left unattended, all doors shall be locked. If suspected unauthorized access has occurred, it shall be reported to Smart Cakrawala Aviation Operations staff and the aircraft must be security checked prior to departure.

## **9.2.15. Start-Up, Ramp Departure and Arrival Procedures**

For engine start up procedures refer to Smart Cakrawala Aviation Standard Operating Procedures and the aircrafts AFM and starting checklists.

Ramp departure procedure;

- The Pilot will request taxi clearance. Once received;
- The pilot will then follow the appropriate taxi lines and comply with the taxi clearance and any additional instructions Ramp arrival procedures;
- Once the aircraft has exited the runway in use, the pilot shall follow all taxi instructions and the appropriate taxi line to the parking stand.
- Upon entering the parking stand or area, pilots will follow the marshalls instructions

## **9.2.16. Multiple Occupancy of Aircraft Seat**

Multiple occupancy of an aircraft seat is not permitted. Each person over two (2) years old must be seated in a separate seat and be secured by a separate seatbelt during the entire flight. Except that; An infant that has not yet reached their 2<sup>nd</sup> birthday may be held on a lap as laid out in section 9.2.2 above.

## **9.2.17. Head Count**

Once the boarding has been completed, the PIC must conduct a head count. If an infant occupies a seat (secured in an approved infant seat or berth), he/she is included in the head count.

At no time will the aircraft doors be closed until the count matches, all required documents have been received, and any required paperwork has been given to the ground personnel.

## **9.3. PROCEDURE OF EMBARKATION/DISEMBARKATION**

The procedures for the safe movement of embarkation/dismountation shall include.

- a. Wherever possible, aircraft should be parked in a location that avoids passenger exposure to hazardous conditions.
- b. Announcement to embarking/dismounting passengers as warranted alerting them to hazardous conditions or dangers that may be encountered during embarkation/dismountation and/or en route to or from the airside exit/entrance points, and advising them to follow any directions provided outside the aircraft.
- c. Adequate guidance and where necessary an escort provided to passengers so as to ensure that their movement while airside are properly controlled as follows:

1. Passengers are directed along the correct and safe route between the aircraft and the airside entrance point, and sufficient personnel are assigned to exercise surveillance and control of passengers.
2. An escort is assigned to control passenger movements when other aircraft or vehicles congest the route to or from the aircraft.
3. Passengers are not exposed to hazards from aircraft operations, fuelling equipment, exposure to jet blasts, engines, rotors or propellers, or to the hazards posed by lighting conditions, obstacle positioned along the route or unsafe surface or stairway conditions.
4. Walkman or similar entertainment system headsets that decrease awareness of other traffic or limit reception of audible direction or warning signals are not worn.
5. Clearly assigning the responsibility for the opening/closing and the locking/unlocking of terminal building doors, to enable passengers to access the apron or terminal.

Where this responsibility is assigned to persons other than the air operator's personnel or those contracted by the Company, the crewmembers are so advised.

6. Where conditions so warrant, the embarking or disembarking activity is postponed until a safe walking zone is prepared.
7. Unsatisfactory or hazardous conditions are reported to the responsible authority.

These procedures shall be incorporated in training programs and training will be provided to crewmembers, ground handling, and passenger agent staff (including contract personnel) involved with the transfer of passengers between the terminal building and the aircraft.

- d. For operations to destination where the aircraft, crew and passengers are subject to customs clearance the PIC shall ensure that all documentation is prepared and that passengers have appropriate passports and related documents. When arriving at such destinations one flight crew member shall



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maintain control over the passengers and, if appropriate, escort them to the  
customs area.



## **9.4. PROCEDURES FOR THE REFUSAL OF EMBARKATION**

The PIC has the statutory authority to refuse entry to his aircraft of anyone whose presence in flight could represent a hazard to the safety of the aircraft or its passengers. Such persons could include those suspected of being under the influence of alcohol or drugs to the extent that the safety of the aircraft or its occupants is likely to be endangered, or of suffering from any form of mental or physical illness which could put the remaining passengers at risk.

Normally from a main base this will be done by security personnel, who also have the authority to refuse the embarkation of persons under the influence of alcohol and drugs. At other locations this duty may fall on the PIC.

In the case of those suffering from known or declared illnesses, arrangements may be made for such persons to be carried in accordance with section 9.2.7 above.

In order to assist the PIC in the proper exercise of this authority, all Company personnel engaged in passenger handling and loading, handling agents and check-in personnel, should alert the PIC if at any time they consider that the condition of a particular passenger could jeopardize the safety of a proposed flight.

If difficulty is encountered in dealing with such passengers, particularly those who may require physical restraint, the assistance of the airport or local police should be requested.

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## **9.5. SERVICING THE AIRCRAFT**

The aircraft may only be serviced by Smart Cakrawala Aviation ground or maintenance staff who have been properly trained in the procedures of servicing, handling, and cleaning of the aircraft and its individual components.

Any ground staff member who suspects any part of the aircraft has been inadvertently damaged during the servicing process or has located a possibly damaged aircraft component shall bring it to the attention of the flight crew or operational staff member immediately.

### **9.5.1. Cleaning of Cabin**

Cleaning should have been finished, and cleaning personnel should have left the aircraft before passenger embarkation.

The flight deck may only be cleaned under supervision of an authorized employee of the company.

## **10. FLIGHT PROCEDURES AND FLIGHT NAVIGATION EQUIPMENT**

Standard Operating Procedures for each phase of flight refer to PT. Smart Cakrawala Aviation Operations Manual Part B – Aircraft and Helicopter Operating Information for Cessna 208, Robinson R66, EC-130 T2 and Pilatus PC-6/B2-H4.

### **10.1. STANDARD OPERATING PROCEDURES**

#### **10.1.1. Additional Standard Operating Procedures while Operating at Aerodromes in Uncontrolled Airspace**

Required Briefing of Airstrip Chart at all Category C Aerodromes.

Each pilot shall refer to the airstrip chart prior to landing at all category C aerodromes. Each pilot is required to brief themselves (and all flight crewmembers if more than one pilot) regarding all information contained on the airstrip chart.

1. Each pilot shall have firmly in mind the abort point and abort procedure to be used if the landing should be rejected.
2. The Pilot flying shall verbally state “Committed” at the abort point if there is more than one flight crewmember.
3. The Pilot flying, or the Pilot Monitoring shall call “Abort” prior to the abort point if the approach should be abandoned for any reason including if the approach becomes unstable. An approach shall be considered unstable if:
  - a. The Airspeed varies +10 or -5 kts IAS from the stabilized approach speed ( $V_{ref}$ )
  - b. The Rate of descent is greater than +/- 200 fpm from the desired rate of descent

Required VHF Air-to-Air Communication (self-reporting) at uncontrolled aerodromes Each pilot is required to self-announce on the proper CTAF frequency for that aerodrome, as indicated on the airstrip chart. At a minimum the pilot shall communicate his intentions and position when:

  1. Overhead
  2. On Final
  3. While maneuvering for landing
  4. Prior to departure
  5. After departure, with intentions.

Communications with Aerodrome Operator prior to landing (HF Radio) For operations to aerodromes in uncontrolled airspace when the abort point is prior to touchdown (airborne abort point), each pilot is required to contact the aerodrome prior to landing (Usually accomplished using HF radio) to announce arrival and to obtain current surface and wind conditions and to ensure the runway is clear.

If radio contact cannot be established the pilot shall fly overhead the aerodrome prior to landing to announce the arrival, ensure the runway is clear and to determine the wind direction and speed.

Operations at a Wind Restricted Category C Aerodrome in Uncontrolled Airspace A pilot shall not land at a category C aerodrome in uncontrolled airspace after the wind time as indicated in the wind restriction box on the airstrip chart unless:

1. The pilot has determined that the wind at the surface is calm and the wind along the approach path can reasonably be expected to remain calm during the approach.
2. The pilot is in radio contact with the aerodrome operator who has advised the pilot on the current wind direction and speed or;
3. If not in radio contact the pilot shall fly overhead the aerodrome and must determine the wind direction and speed for himself prior to beginning the final approach.

Wind direction and speed may be determined by:

- a. Observing a wind sock located near the touchdown area
- b. Observing another indicator such as a flag, smoke or trees blowing
- c. Using the wind indicator on the aircraft's cockpit display
- d. Or a combination of each of the above

## **10.2. INSTRUCTIONS ON USING CHECKLIST**

### **10.2.1. Smart Cakrawala Aviation Policy**

The use of written checklists to assist in the proper operation of the aircraft is mandatory for all flights. No crew member is expected to attempt to accomplish, without omission every detail of a flow from memory. Such an expectation would negate the basis and practicality of using a written checklist.

- a. Using the challenge-and-response system indicated on the checklist, it shall be the PIC's responsibility to confirm the appropriate checklist is used for all phases of flight. The Pilot Flying of the aircraft makes all calls for checklists.
- b. The proper method is to accomplish the flow to the extent possible from memory and then to utilize the checklist to ensure that any overlooked items are then accomplished.
- c. Certain portions of the emergency checklist are required to be accomplished immediately, from memory, during an emergency. It is the responsibility of flight crew to commit these portions to memory and review the adequacy of their recall on a frequent basis.
- d. Checklist items will be read in a loud, clear voice and the proper response will be equally clear and understandable. If the proper response is not forthcoming, the Flight Crew reading the checklist will repeat the challenge, if necessary, until the proper response is provided. Undue haste in the execution of any checklist is neither necessary nor desirable.

Checklists shall be available in the cockpit and used for all phases of flight, including the outlining of emergency and abnormal procedures.

Only those checklists approved will be used. Checklists shall be based on the manufacturers' recommended operating instructions.

### **10.2.2. Smart Cakrawala Aviation responsible**

Smart Cakrawala Aviation is responsible to provide original operational checklist placed in every aircraft type. The original operational checklist are including of:

- Daily normal checklist,
- Pilots briefing checklist,
- Abnormal and Emergency checklist,
- Passengers briefing.

2 (two) sets of Smart Cakrawala Aviation operational checklist must be available in each aircraft. Both of them are ready for use by pilots in the cockpit.

Chief Pilot is responsible for keeping availability of operational checklist in the aircraft. Chief Pilot will be responsible to review and revising any amendment in the checklist. The checklist review will be conducted every year or when there is a significant change in the sequence or procedures.

Flight crew members are responsible to check the availability of checklist, and preservation of its condition. Pilots must use and read the operational checklist in all phase of flight that required checklist reading. Except for Memory Item stated in the Emergency checklist, no pilots allowed to memorize contain of the checklist. Flight

crew members are not allowed to carry the operational checklist belonging to the aircraft with them beyond the operational reason.

A copies of Smart Cakrawala Aviation operational checklist will be kept in the head office for purpose of aircraft and procedures crew training. These copies must be mark as for training purpose only.

### **10.2.3. Dual Pilot Operations**

When dual pilot operations, Smart Cakrawala Aviation adopt multi crew concept regulates the organization of work and task sharing on the flight deck. The objectives are as follows:

- a. Function of the PF for the primary task of flying the aircraft.
- b. Clearly defined and balanced workload distribution.
- c. Mutual information, supervision and support to achieve a maximum of redundancy.

When a pilot transfers control of the aircraft, a minimum of one pilot continuously maintains:

- Unobstructed access to the flight controls;
- Alertness and situational awareness

### **10.2.4. Responsibility of Action**

Each pilot shall carefully and properly perform his assigned duties. Any intended or observed deviation from normal flight operation and/or standard operating procedures shall be announced and acknowledged.

### **10.2.5. Call-Outs and Instructions**

Certain call-outs as well as instructions shall be confirmed verbally (two-way communication). A fixed wording is used for high priority communication, e.g. extending or retracting flaps, for power setting (refer to particular aircraft type SOP). By confirming, the concerned Flight Crew Member becomes responsible for the execution of the assigned task. After checking the necessary parameters, he acts accordingly.

The pilot having assigned the task shall assure himself of the proper execution.

### **10.2.6. Monitoring and Supervision**

In addition to his primary tasks, each Flight Crew Member shall monitor the flight progress and supervise the actions of other Flight Crew Member.

### **10.2.7. Task Sharing**

The PF shall focus his attention primarily on the control of the aircraft.

Whenever other activities or special events may prevent the PF from fulfilling this task, he shall hand over to the PM with the call-out "You have control". The PM shall confirm takeover with the reply "I have control".

The PM shall assist the PF, by e.g.:

- a. Supervising the PF;

- b. Performing Radio Telephony and other related tasks as described by the particular SOP.

During manual flight, **all** inputs to the auto flight control units shall be performed by the PM, on command of the PF.

During auto flight, all inputs to the auto flight control units shall be performed by the PF.

**Note:**

For specific aircraft type task sharing, refer to particular aircraft type SOP.

## **10.2.8. Use of Normal Checklist**

The checklist is used to verify that essential steps for particular procedure or flight phase are accomplished.

Normally the PM reads the checklist unless during ground maneuver where Pilot on the Right Hand Seat should always be responsible for the completion of the checklist reading. Reading of the **CHECKLIST** should be aloud and in command tone.

Pilot who responses to the checklist items should visually confirm that the challenge action such as a switch position, configuration change, etc. have been properly accomplished and the other should respond using the correct wording terms as stated

in the checklist, i.e. check-on, check-off, etc.

**NOTE:**

- a. One checklist must be within immediate reach at each pilot's station.
- b. The items on the checklist shall be performed as a "challenge and response check" unless specified that an item may be performed by one pilot alone (silent check) or for immediate actions during an emergency (verbal check).
- c. The next item is not to be called until a satisfactory response is received.
- d. The exact terminology of the cockpit checklist shall be adhered to.
- e. Proper use of the checklist is essential to safety and requires crew coordination.
- f. When interrupted for whatever reason, reading of the checklist should be suspended until concentration can be continued.

## **WALK AROUND**

Should be carried out each time before flight departure by one of the pilot, i.e. for first flight and during transit ground stop, also when flight is terminated.

## **PREFLIGHT AND COCKPIT PREPARATION**

Must be done before the first leg for the new set crew in one scheduled day. This section is preparing the aircraft the concerning serviceability of the aircraft systems. Thereafter they are not necessary to be done for subsequence flights.

### **"BEFORE START"**

Must be done every time before starting the first engine and the start clearance has been received.

### **"AFTER START"**

Must be done after complete starting of both engines.

**" TAXI OUT"**

Do not commence " TAXI OUT" checklist until the aircraft has cleared from congested area.

**"BEFORE TAKE OFF"**

Must be done before entering the run way or during taxi if applicable.

**"AFTER TAKE OFF"**

Must be done "AFTER TAKE OFF" checklist until clear of other traffic in the area.  
A minimum height of 1000 ft is recommended under normal circumstances.

**"CRUISE"**

Must be done after reaching cruising altitude and engine cruise power setting has been set.

**"DESCENT"**

Must be done at the end of cruise flight and descent briefing has been completed

**"LANDING INITIAL"**

Must be done before reaching the circuit altitude, preferably 5 minute from ETA.  
Preparation prior to commencing a landing approach.

**"LANDING FINAL"**

Must be accomplished after all landing configuration have been set before passing 500 feet above ground level.

**"TAXI IN"**

Should be performed when the aircraft is cleared from the active runway.

**"AFTER PARKING"**

Will be done during engine shutdown or after completed both engine shutdown.

## **10.2.9. Acknowledgment of Order**

All orders related to the handling of the aircraft, given by the PF, shall be acknowledged when carried out by the PM as applicable.

Orders which require some time for completion (e.g. flap retraction, power adjustment, request for clearance etc) shall be repeated by the flight crew concerned and acknowledged as soon as the desired position setting etc, has been obtained.

Operationally, the checklist should be done accordingly, i.e. L by LH Seat Pilot and R by

RH Seat Pilot, or PF by Pilot Flying or PM by Pilot Monitoring.



## **10.3. DEPARTURE CONTINGENCY PROCEDURES**

Smart Cakrawala Aviation shall consider the necessity to establish contingencies procedures for take-off and missed approach / bailed landing depending on the aircraft performance. On departure due to the unavailability of a circling area for immediate return, the operator shall plan in advance an alternate departure aerodrome.

A copy of the contingency procedures for the type and class of airspace in which the operation is to be conducted will be carried on the aircraft and flight crewmembers will familiarize themselves with the contingency procedures prior to departure.

## **10.4. ALTITUDE AWARENESS AND ALTITUDE CALL OUTS**

All Smart Cakrawala Aviation pilots, except while holding in a holding pattern of two (2) minutes or less, or while turning, pilots operating an aircraft under Day VFR in level cruising flight more than 3,000 feet above the surface and below 20,000 feet MSL shall maintain the appropriate

altitude or flight level prescribed in the diagram in the CASR 91.159 - VFR Cruising Altitudes and Flight Levels or otherwise authorized by ATC.

Smart Cakrawala Aviation pilots must conform an altitude clearance given by ATC if below the proposed intended altitude, especially if flying into mountainous area.

Smart Cakrawala Aviation pilots must maintain, for Day VFR operations, except only when necessary for the purpose of takeoff or landing:

- At an altitude not less than 1000 feet above any surface.
- At an altitude not less than 1000 feet from any mountain, hill, or other obstruction in the flight path.

When dual pilot operations, for VFR flight Smart Cakrawala Aviation pilot must give an altitude warning calls-out 500 feet before reaching the intended altitude. The call-out is "500 FEET TO (intended altitude)".

A call-out by the PM is mandatory when passing applicable minimum altitudes, except when established on final approach

## **10.5. CLARIFICATION AND ACCEPTANCE OF ATC CLEARANCE**

All Smart Cakrawala Aviation pilots, if departure from, or fly in the area, or fly in bound in to, an airport with an ATC unit, must request clearance and accept or follow all clearance and instruction given by the ATC. A read back by pilots must be given as a sign of acceptance. If the clearance given by ATC is different or far from an intended or propose pilots flight plan, a clarification must be addressed.

Smart Cakrawala Aviation pilots may object a clearance if;

- Given an altitude with direct flight into terrain,
- Given an altitude that can be maintain or climb into,
- Direct a flight into a cloud,
- Direct a flight into terrain,
- Direct a flight into other known traffic by pilots.

If a departure is made from airport without ATC unit, Smart Cakrawala Aviation pilots must broadcast in the area radio frequency to other traffic in the airport area, his/her intended altitude or change of intended altitude and pilots intentions. Smart Cakrawala Aviation pilots must also maintain a safe separation from other traffic in the airport area or along the propose route.

## **10.6. DEPARTURE AND APPROACH BRIEFING**

The takeoff briefing shall be performed at the latest during taxi.

But, in respect of workload and availability of ATC clearance, it is highly recommended to perform the takeoff briefing at the parking position.

In that case, the flight crew will simply confirm, during taxi, that the briefing performed

remains valid and, recall the very beginning part of the SID.

The object of briefing is to ensure that all crew members are aware of and agree with a proposed plan of action. Briefings should be as short as possible but give a clear understanding of the intentions. It is normally unnecessary to repeat SOP, but it is vitally necessary to cover any special requirements.

### **10.6.1. Departure Briefing**

All Smart Cakrawala Aviation pilots must perform a departure and approach briefing at specified phase of flight. The PIC if acting as Pilot Flying is responsible for performing the briefing or delegates to the First Officer when acting as Pilot Flying.

Departure including take off briefing will be given before starting engine or before starting checklist reading. Approach briefing will be given including in the descent briefing at a convenient time before descent is start.

Before every take-off, a briefing will be given to cover all the relevant aspects of that take-off and subsequent departure. Full details of this briefing are to be found in the relevant Standard Operating Procedures, Type Related.

The object of briefing is to ensure that all crew members are aware of and agree with a proposed plan of action. Briefings should be as short as possible but give a clear understanding of the intentions. It is normally unnecessary to repeat SOP, but it is vitally necessary to cover any special requirements.

Any significant change affecting the departure or performance of the aircraft, shall be reviewed and updated, if necessary, before takeoff.

Departure briefing shall be conducted by the PF, and shall include the following items:

- a. Name of the departure
- b. Type of departure
- c. Routing to be flown
- d. Altitude constraints
- e. Initial climb clearance
- f. Applicable safety altitudes
- g. Radio Aid set-up

All of these items, but particularly any significant change affecting the departure or performance of the aircraft, shall be reviewed and updated, if necessary, before takeoff. Before every take-off all flight crew members shall be aware of the pressure altitude for the transition altitude.

## **10.7. PROCEDURES FOR FAMILIARIZATION AREAS, ROUTES AND AERODROMES**

Smart Cakrawala Aviation aircrafts will be operated into mountainous areas with many remote airstrips without navigation facilities. This will require more skill and awareness from the Pilot. Therefore, some of procedures for route and airport qualifications required are:

- a. All flight crew shall be experienced with, and have an adequate knowledge of the routes to be flown and airports to be used.
- b. All flight crew will be thoroughly briefed regarding route and airports before leaving base, by making full use of all available information.
- c. It is the responsibility of the individual pilot to ensure that he is qualified to fly a particular route, or use a particular airstrip / airport. He must be thoroughly knowledgeable of all aspects of the operation, and be able to comply with all applicable regulations and local procedures for the route to be flown.

The PIC must have current and pertinent knowledge of route to the satisfaction of the Chief Pilot. This includes:

- a. Seasonal meteorological conditions;
- b. Communication and navigational facilities including airport visual aids;
- c. Kinds of terrain and obstruction;
- d. Minimum safe flight levels;
- e. En-route and terminal area arrival and departure procedures, holding procedures and authorized instrument approach procedures for the airport involved;
- f. Congested area and physical layout of each airport in terminal area involved.

All Smart Cakrawala Aviation pilots must be familiar with the area, route and airports that Smart Cakrawala Aviation aircraft planning to fly and to land. Before being assigned as Commander or as pilot to whom the conduct of the flight is delegated, the pilot shall obtain adequate knowledge of the route to be flown. This shall include knowledge of:

- a. the terrain and minimum safe altitudes
- b. the seasonal meteorological conditions
- c. the meteorological, communication, air traffic facilities and service procedures
- d. the search and rescue procedures
- e. the navigational facilities associated with the route along which the flight will be conducted

This knowledge is achieved by self-study of the applicable parts of the AFM.

Before a flight to any aerodrome, all pilots shall obtain adequate knowledge of the aerodromes which are used, including the procedures applicable to flight paths over heavily populated areas and areas of high traffic intensity, obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures and applicable aerodrome operating minima.

For complete explanation on area, route, and airport familiarization refer to:

- Indo Avis Route Chart Manual
- VFR Route Guidance
- Operations Manual Part C

## **10.8. STABILIZED APPROACH PROCEDURES**

### **10.8.1. General**

A stabilized approach is one of the key features of a safe approach and landing in public transport operations. A stabilized approach is characterized by a constant angle, constant-rate descent approach profile.

If at any time during an approach there is doubt that any element of the stabilized approach can not be achieved or maintained, the approach should be discontinued.

All Smart Cakrawala Aviation flights must be stabilized by 500 feet above airport elevation in visual meteorological conditions (VMC).

An approach is stabilized when all of the following criteria are met:

1. The aircraft is on the correct flight path;
2. Only small changes in heading/ pitch are required to maintain the correct flight path;
3. The aircraft speed is not more than VREF+20 knots indicated airspeed and not less than VREF;
4. The aircraft is in the correct landing configuration;
5. Sink rate is no greater than 1,000 feet per minute; if an approach requires a sink rate greater than 1,000 feet per minute, a special briefing should be conducted;
6. Power setting is appropriate for the aircraft configuration and is not below the minimum power for approach as defined by the aircraft operating manual;
7. All briefing and checklists have been conducted;
8. Specific types of approaches are stabilized if they also fulfill the following:  
instrument landing system (ILS) approaches must be flown within one dot of the glide slope and localizer; during a circling approach, wings should be level on final when the aircraft reaches 300 feet above airport elevation;
9. Unique approach procedures or abnormal conditions requiring a deviation from the above elements of a stabilized approach require a special briefing.

An approach that becomes un-stabilized below 500 feet above airport elevation in VMC requires an IMMEDIATE GO-AROUND.

**DO NOT ATTEMPT TO LAND FROM AN UNSTABLE APPROACH  
AN APPROACH THAT BECOMES UNSTABILIZED BELOW 1,000 FEET AFE IN  
IMC OR BELOW 500 FEET AFE IN VMC REQUIRES AN IMMEDIATE GOAROUND**

### **10.8.2. Stable Approach Requirement**

An approach shall be discontinued immediately if an approach is not stable below 1000 feet or after leaving circling altitude, as applicable. Compliance with stable approach requirements is essential to flight safety.

Required maneuvering to comply with an approach procedure (such as during the visual segment of an approach procedure or during a visual approach) is permitted.

### **10.8.3. Missed Approach Decision**

On final, the Pilot Flying is responsible for executing a go around if any of the parameters listed above are exceeded without Pilot Flying correction. If the Pilot Monitoring observes that the Pilot Flying is not executing a go-around, he is

responsible for directing a go-around by calling “GO-AROUND”. The directed go around

Will be executed unless an emergency situation overrides this requirement.

If in Pilot’s judgment a safe landing cannot be accomplished within the touchdown zone, or the aircraft cannot be stopped within the confines of the runway, a go around

Is required.

#### **10.8.4. Consecutive Missed Approaches**

In the event of any missed approach, it is the Company policy that the number of approaches to any airport is limited to 2 (two), unless:

1. There is a significant improvement in the weather conditions and there is a good possibility of landing on a third approach.
2. It is the PIC responsibility to decide whether a second approach is practicable after initiating a go-around from the first approach.
3. If the third attempt fails, the aircraft should divert to the alternate

#### **10.8.5. No Fault Go-around Policy**

No Fault Go-around policy recognizing that a successful approach can end in a missed approach. If the stabilized approach requirements cannot be satisfied by the minimum stabilized approach height or maintained throughout the rest of the approach, a go-around is required.

- a. Smart Cakrawala Aviation pilots should execute every approach with the presumption that a missed approach is successful approach outcome. Plan each approach including with the missed approach procedure and make the decision to land only when all criteria are safely satisfied.
- b. The Smart Cakrawala Aviation PIC has full control and authority in the operation of the aircraft, however the PIC should give every consideration to a recommendation by another Smart Cakrawala Aviation cockpit crewmember that a missed approach be executed.
- c. The Smart Cakrawala Aviation First Officer is required to immediately advise the Smart Cakrawala Aviation PIC of any deviation from applicable regulations, policies or procedures, or any unsafe condition which may place the Smart Cakrawala Aviation aircraft, passenger or crewmember in danger or unsafe condition.

## **10.9. LIMITATION ON HIGH RATES OF DESCENT NEAR THE SURFACE**

When flight under Day VFR operations, all Smart Cakrawala Aviation pilots must follow standard VFR approach procedures stated in the Smart Cakrawala Aviation VFR Route Guidance for the appropriate airport intended.

All Smart Cakrawala Aviation flights must be stabilized by 500 feet above airport elevation in visual meteorological conditions (VMC).

All Smart Cakrawala Aviation flights must comply with the stabilized approach procedures by 500 feet above airport elevation.



## **10.10. MAINTAINING RADIO LISTENING WATCH**

A continuous listening watch is to be maintained at all times from starting to shut down. This applies not only to flights within Control Areas and Control Zones but also to flights within Flight Information Regions.

The only exceptions permissible are:

1. When watch has to be discontinued for reasons of aircraft safety, such as danger of lightning, electrical discharge, or a defect in the aircraft radio apparatus which may endanger the safety of the aircraft, and
2. When permission has been granted by the appropriate aeronautical control station to discontinue radio watch for special reasons.

The radio watch must be maintained on the normal working frequency of the aeronautical ground station controlling the area in which the aircraft is flying, and when necessary, permission must be obtained from one control station before changing to another.

## **10.11. NAVIGATION PROCEDURES**

### **10.11.1. General**

An aircraft shall not be operated unless the required navigation equipment is installed.

The failure of a single navigation unit may not result in the inability to operate safely on the route to be flown. Detailed information about the required operational status of equipment is provided in the MEL.

- a. Pilots are responsible for the correct use of the navigation and communication equipment installed in the aircraft.
- b. Continuous monitoring and crosscheck of the equipment and its performance capability compliance is mandatory during its use.
- c. Special attention must be paid to the engagement status of system used in order to avoid late recognition of mode or configuration changes which could result in abnormal situation (e.g., unscheduled disengagement).

### **10.11.2. Procedures in the Event of System Degradation**

Any degradation or failure of navigation facilities which occurs must be assessed and contingency procedures should be prepared if required.

Any degradation of on-board equipment which occurs must be taken into consideration for the purpose of in-flight planning/re-planning for enroute, destination and alternate.

### **10.11.3. Independent Cross Check**

1. It is the PIC responsibility to ensure that the navigation performance of the aircraft is continuously monitored and that the present position is verified at regular intervals.
2. This requirement ensures that the flight path is monitored for tracking accuracy to comply with airspace regulatory requirements and that aircraft separation or terrain clearance is never compromised.
3. The procedures for pre-flight cross-checking of flight management system database tracks and distances are detailed in the respective aircraft SOP.
4. Flight crew must be aware that aircraft navigation systems shall be monitored at all times and that cross-checking and position verifying procedures are an integral part of flight crew responsibilities.

### **10.11.4. In Flight Re-planning**

For in-flight re-planning, pilots must not only check if the fuel requirements for inflight re-planning will be met, but also if the available navigational aids for the replanned route and/or the re-planned destination, as well as the airborne equipment, will be sufficient for a safe conduct of the flight.

## **10.12. IN-FLIGHT FUEL MANAGEMENT POLICY (CASR 91.149, 135.569)**

### **10.12.1. General**

The PIC shall ensure that the fuel checks are carried out at regular intervals throughout the flight, at least once per flight and once every hour when a flight more than 2 hours block-time. The remaining fuel shall be recorded on the OFP and evaluated to:

1. Compare actual consumption with planned consumption.
2. Check that the remaining fuel is sufficient to complete the flight.
3. Determine the expected fuel remaining on arrival at destination.
4. The Pilot in Command shall continually ensure that the amount of usable fuel remaining is not less than the fuel required to proceed to an aerodrome where a safe landing can be made with the planned Reserve Fuel remaining upon landing.
5. All quantities should be calculated taking into account the current updated known and expected conditions (winds, weather, NOTAMS, A/C status) and using graphs or tables.

### **10.12.2. Flight Fuel Checks**

In-flight fuel monitoring is made using the Operational Flight Plan. The crew must carry out regular fuel checks noting:

- a. Time of observation
- b. Fuel used
- c. Remaining fuel on board
- d. Fuel flow Subtract "Fuel used" from the Block Fuel (recorded before engine start) and compare this figure with the "Remaining fuel on board". If there is no major discrepancy, the figures read on the aircraft should be used.

This type of monitoring would detect fuel leaks and provide a more reliable basis of calculation in case of either Fuel Quantity Indicator or Fuel Used failure during flight.

### **10.12.3. Low Fuel Situation**

Minimum fuel operation: according to the provision of the continuance of flight described below, the decision has been taken to burn the ALTERNATE fuel over the destination airport a statement should be made to ATC about the **commitment to land** at that specific airport due to fuel reasons. This will only inform the controller that any undue delay would lead to an emergency fuel situation.

In dealing with the likelihood of low fuel situation, the PIC shall carry out the following 3 essential steps in sequence:

1. The pilot-in-command shall request delay information from ATC when unanticipated circumstances may result in landing at the destination aerodrome with less than the final reserve fuel plus any fuel required to proceed to an alternate aerodrome or the fuel required to operate to an isolated aerodrome.
2. The pilot-in-command shall advise ATC of a minimum fuel state by declaring MINIMUM FUEL when, having committed to land at a specific aerodrome, the pilot calculates that any change to the existing clearance to that aerodrome may result in landing with less than the planned final reserve fuel.

3. The pilot-in-command shall declare a situation of fuel emergency by broadcasting **MAYDAY MAYDAY MAYDAY FUEL**, when the calculated usable fuel predicted to be available upon landing at the nearest aerodrome where a safe landing can be made is less than the planned final reserve fuel.

## **10.13. ADVERSE AND POTENTIALLY HAZARDOUS ATMOSPHERIC CONDITION**

No pilot may operate his aircraft in flight where hazardous conditions are known to exist or expected to be encountered unless the aircraft is adequately equipped to operate in those conditions, and the flight is operated in accordance with CASRs, the approved aircraft flight manual, and this section of the operations manual.

The PIC has final authority as to whether the flight can be operated safely in or near the hazardous condition, and will base his decision on conditions that exist at the time of the flight and forecast and known conditions along the route of flight.

### **10.13.1. Thunderstorms and Severe Turbulence**

No pilot may enter or fly near a thunderstorm or attempt to penetrate an area of severe turbulence.

The extreme dangers of severe turbulence are structural damage or failure, loss of control through accelerated stall or upset, and wind shear if at low level.

Attempting to fly underneath a squall line may result in wind and turbulence worse than inside a thunderstorm. Racing a thunderstorm to a landing or takeoff is dangerous. The pilot should delay the departure or, if airborne, consider using an alternate.

If the aircraft inadvertently flies into or is unable to avoid a thunderstorm the pilot should:

1. Disengage the autopilot (if installed or applicable)
2. Fly at the recommended turbulence penetration speed
3. Turn on pitot heat, engage the inertial separator, activate any anti-icing equipment installed in accordance with the aircraft flight manual.
4. Warn passengers to fasten and/or tighten seatbelts and to expect turbulence
5. Attempt to maintain a level flight attitude, avoid large control movements, and anticipate turbulence. Airspeed and altitude fluctuations are to be expected.

Don't attempt to maintain a specific altitude or airspeed.

Appropriate weather detection equipment must be installed and serviceable prior to any flight in the area of known or forecast thunderstorm activity. This equipment should be either weather radar or lightening detection equipment.

Each pilot should be fully trained in the use and limitations of each type of weather detection equipment.

This equipment is not intended to be used to penetrate into a thunderstorm or to fly near a thunderstorm, it is intended to be used to safely circumnavigate areas of thunderstorms and convective activity.

### **10.13.2. Wind shear**

The most prominent meteorological condition that causes significant low level wind shear are thunderstorms and certain frontal systems at or near airports.

Low level wind shear is hazardous to both arriving and departing traffic.

Low level wind shear can exist on all sides of a thunderstorm and up to 15 miles in front of the actual storm. The temperature difference across the front and the frontal speed determines the strength of the wind shear.

Turbulence may or may not be associated with the wind shear.

PIREP's are an important source of information on wind shear.

If wind shear is reported, expected or forecast the pilot should consider delaying departure until the wind shear threat dissipates, or plan a departure course that avoids the forecast or expected wind shear conditions.

During approach and landing the pilot should closely monitor power, pitch attitude, airspeed, and vertical velocity. If wind shear is encountered the pilot should react immediately to get out of the wind shear condition. This may require full power and pitch attitudes close to the critical angle of attack.

All pilots should immediately report any encounter with wind shear to ATC, in order to warn other pilots of the potential danger.

### **10.13.3. Clear Air Turbulence**

Clear air turbulence may sometimes be avoided by increasing/decreasing the cruising level if operational considerations so permit. Monitoring of other aircraft reports also assists in avoidance.

### **10.13.4. Volcanic Ash Clouds**

The atmospheric repercussions of volcanic activity can be particularly hazardous to aircraft. Flight through volcanic ash can cause extreme abrasion to all forward facing parts of the aircraft, to the extent that visibility through the windshields may be totally impaired, aerofoil and control surface leading edges may be severely damaged, airspeed indications may be completely unreliable through blocking of the pitot heads and engines may become so choked as to cause power interruptions or even shutdowns.

The NOTAM system now details known areas of volcanic activity where ash may be present in the atmosphere. Flight into such known areas is to be avoided, particularly at night or in daytime forecast IMC conditions when ash clouds may not be seen.

Reported instances of flight into such activity indicates that the weather radar will not pick up any returns so the only avoidance methods are by NOTAM or visual contact. In the event of inadvertent penetration of ash cloud, the major immediate problem is to keep all or some of the engines running and find the shortest route out of the cloud, which may be downwards.

When on the ground, aircraft should ideally be ferried to safer ground when eruptions are forecasted. If this is not possible due to circumstances, they should be kept under cover (with all blanks and cover installed). These should be carefully removed before flight to ensure that accumulations of ash are not deposited in the orifices which the covers are designed to protect. Since ash is very acid and ash particles are very small, it is very likely that ash has protruded through the smallest of orifices and a PIC is not to fly the aircraft unless a thorough inspection by a licensed engineer has been completed, and the aircraft has been released accordingly.

### **10.13.5. Significant Temperature Inversions**

All ambient temperature variations have an effect on aircraft performance.

Inversions will usually affect performance adversely. The significance of this will vary according to aircraft type and operating mass. Examples of inversion effects include those shown below.

- a. Large temperature inversions encountered shortly after take-off can seriously degrade an aircraft's climb performance, particularly at high operating mass. Similarly if the aircraft is operating to a maximum landing mass limited by go-around climb performance considerations, the required gradient may not be achieved.
- b. The maximum cruising altitude capability of the aircraft can be significantly reduced if a temperature inversion of even small magnitude exists in the upper levels. This may prevent an aircraft reaching its preferred cruising altitude. Should an aircraft encounter an area of inversion once in the cruise at limiting altitude its buffet margins may be so eroded that a descent is necessary. Temperature inversions at lower levels in the atmosphere are frequently associated with deteriorating visibility and can prevent the clearance of fog for prolonged periods.

#### **10.13.6. Mountain wave**

Mountain waves are caused by a significant airflow crossing a mountain range. On some airports, relief or obstacles may cause special wind conditions with severe turbulence and wind shear on approach or during take-off.

Special procedures or recommendations are indicated on airport charts when appropriate. They must be taken into account by the flight crews for the choice of the landing or take-off runway.

## **10.14. OPERATING RESTRICTION**

### **10.14.1. Turbulent Air and Thunderstorms**

Flight into areas where severe turbulence is forecast or will be encountered should be avoided if possible. Power settings and pitch attitude should be established before entering a storm and maintained, rather than attempting to maintain a constant airspeed. A safe penetration speed for the aircraft is provided in the limitations section of the AFM.

All Smart Cakrawala Aviation pilots must avoid known turbulence and thunderstorms area.

### **10.14.2. Windshear Avoidance**

All Smart Cakrawala Aviation pilots must carefully access all available information such as pilot reports of windshear or turbulence, low level windshear alerts, and weather reports, including thunderstorm and virga activity.

All Smart Cakrawala Aviation pilots must avoid areas of known severe windshear. If severe windshear is indicated, all Smart Cakrawala Aviation pilots must delay take-off or do not continue an approach until conditions improve.

All Smart Cakrawala Aviation pilots should broadcast any instances of airspeed fluctuation when shear is encountered.

Sign if aircraft encountering windshear, upon entering the outflow area of a downburst, may encounter airspeed fluctuations but no significant control problems. Another aircraft on the same flight path a few minutes later, may experience airspeed changes many times greater than the previous aircraft, accompanied by marked performance degradation and handling difficulties.

### **10.14.3. Headwinds and Tailwinds**

Observe the maximum allowable tailwind component for landing or take-off as described for each particular aircraft type.

### **10.14.4. Crosswind Take-Offs**

Observe the maximum allowable tailwind component for landing or take-off as described for each particular aircraft type.

### **10.14.5. High Altitude Operation**

Below are the operational consequences of “hot temperature and high altitude” conditions could result in any or all the following;

- Engines are “temperature limited” and maximum thrust/torque/power is not available
- Lift generation is reduced
- Maximum takeoff weight may be limited
- The IAS/TAS relationship will result in higher speeds over the ground in all phases of flight
- Due to reduced thrust, lift generation and higher ground speed for a given IAS, takeoff roll will be increased



- Rate of climb will be reduced
- Radius of turn will increase
- Missed approach climb capability will be reduced
- Stopping distance will be increased (stopping distance is related to mass x TAS squared)
- Maximum tyre rotation speed may be compromised on takeoff or on landing

### **Mitigating Strategies**

In all circumstances, performance calculations must take density altitude into consideration when calculating maximum takeoff weight, climb gradient, missed approach climb gradient and stopping distance.

In addition, the following items should be considered to reduce the impact of “hot temperature and high altitude” operations:

- Plan operations around the coolest time of the day (earliest morning)
- Use the runway which provides for the best aircraft performance (usually, but not always, the longest runway)
- Limit payload or plan for an intermediate fuel stop at an en-route airfield.
- Avoid tailwind operations
- Allow for increased turn radius when maneuvering
- Ensure that engine at takeoff thrust/torque/power is meeting charted values
- Where charts are provided, calculate an acceleration/time profile
- Fly the aircraft in accordance with the manufacturer’s guidelines.

Smart Cakrawala Aviation operation control will provide pre-calculation take off weight for all high elevation airports. It determines how many load to be carried at specified high elevation airport. Refer to Smart Cakrawala Aviation Airport Operation Limitation list for complete information.

All Smart Cakrawala Aviation pilot must strictly follow Airport Operation Limitation for load calculation before taking off from high elevation airport.

## **10.15. INCAPACITATION OF FLIGHT CREW MEMBERS (135.387)**

### **10.15.1. General**

Incapacitation is defined as any condition affecting the physical or mental health of a crew-member during the performance of his duties which renders him incapable of properly performing those duties. While the remedial action which can be taken within an aircraft in the event of flight crew incapacitation varies according to cockpit design and size, as well as to the overall crew complement of the aircraft, the general principles are as follows:

Incapacitation can be gradual or sudden, subtle or overt, partial or complete and may not be preceded by any warning.

### **10.15.2. Partial or Gradual Incapacitation**

The following procedures are to be used if a pilot suffers any medical symptoms in flight which might impair his ability to handle the aircraft such that, if he were in a two pilot crew, he would hand over control. These symptoms include severe pain (especially sudden severe headache or chest pain), dizziness, blurring or partial loss of vision, disorientation, vomiting or diarrhea. The procedures must be followed even if the pilot has apparently recovered, as temporary symptoms are often a warning of more severe illness to follow, and self-diagnosis is notoriously unreliable.

#### **Two Pilot crew**

If the affected pilot is handling the aircraft, he is immediately to inform the other pilot and hand over control to him. The destination, base or appropriate agency, is to be informed of the problem and a diversion made to the nearest suitable landing place, bearing in mind the nature and severity of the symptoms and the availability of medical facilities.

The affected pilot is not to take control again for the remainder of the flight and is to lock his shoulder harness to prevent him falling on to the controls if the illness becomes more severe. The affected pilot is not to fly again as a crew member until he has been medically examined or, in the case of diarrhea or vomiting, has had no symptoms for 24 hours.

### **10.15.3. Sudden or Complete Incapacitation**

Complete incapacitation may be subtle or overt, and may not be preceded by any warning. While incapacitation may occur at any stage of flight, fatal collapse among flight crew has most commonly occurred in the critical stages of approach and landing when ground proximity presents a direct hazard. Where the pilot handling the aircraft is incapacitated an accident is inevitable, unless the other pilot detects the collapse and is able to assume control in sufficient time.

Detection of the incapacitation in the subtle case may be indirect, i.e. only as a result of the pilot not taking some expected action. If, for example, the pilot conducting the approach to land collapses without any overt sign and the body position is maintained, the other pilot will not be aware of his colleague's collapse until the expected order of events becomes interrupted.

- a. Two pilot crew In the context of pilot incapacitation it is essential that crew members closely monitor the aircraft's flight path in the critical stages of take-off,

initial climb, final approach and landing, and immediately question any deviation from the norm.

Normal crew duties require that during all stages of the flight, pilots and other crew members call the handling pilot's attention to any deviation from the normal flight path or ATC clearance. Adherence to this procedure should assist early detection of the incapacitation of the handling pilot.

Where the pilot handling the aircraft has collapsed, the other pilot will assume control. Taking control presupposes that the collapsed pilot's body does not interfere with the essential primary flying controls and for this reason the requirement to wear full harness whilst occupying a pilot seat is a safeguard.

Once incapacitation has been detected, the first requirement is to ensure that the affected pilot does not interfere with any controls. It is therefore essential that his harness should be locked and, if possible, the seat slid back.

Consideration should be given, if practical, to the briefing and use passengers for this task, but caution must be observed due to the risk of the seat moving forward when it becomes unlocked. The next priority is to re-plan the flight, including consideration of diverting to the nearest suitable destination.

Medical advice indicates that immediate first aid is not essential or necessary in cases of sudden incapacitation. Therefore, any attempts at first aid should be delayed until after the immediate operational problems have been dealt with.

#### **10.15.4. Summary**

Assuming that two pilots are carried, the recovery from a detected incapacitation of the handling pilot shall follow the sequence below:

- a. The fit pilot must assume control and return the aircraft to a safe flight path;
- b. The fit pilot must take whatever steps are possible to ensure that the incapacitated pilot cannot interfere with the handling of the aircraft. These steps may include involving passengers to restrain the incapacitated pilot.
- c. The fit pilot must land the aircraft as soon as practicable to ensure safety of the occupants.

#### **10.15.5. The 'Two Communication' rule**

The 'Two Communication' rule of thumb should be invoked to assist in detecting incapacitation. This states that a flight crew member should suspect the onset of incapacitation any time when a pilot does not respond appropriately to a second verbal communication associated with a significant deviation from a standard operating procedure or flight profile.

#### **10.15.6. Action to Be Taken When Pilot Incapacitate**

##### **❖ First Step**

- ❖ Take over control by announcing "My Control ", engage autopilot.
- ❖ Declare URGENCY or EMERGENCY whichever is applicable;
- ❖ Call the Engineer on Board (if available) via PA or chime system, have the incapacitated crew member removed from his seat. In any case his seat shall

be moved fully back to prevent obstruction of flight controls, switches, levers, etc. Assistance of other crewmember or passengers might be required.

- If necessary, reset COMM and NAV to remaining pilot side.

### ❖ **Second Step**

- Take care of the incapacitated crew member by trying to provide first aid treatment;
- Arrange a landing as soon as practicable after considering all pertinent factor (condition of the incapacitated, remaining flight time and suitability of en-route airport for emergency landing);
- Arrange medical assistance after landing – giving as many details about the condition of the affected crew member as possible.

### ❖ **Third Step**

- Prepare for landing (cockpit and cabin), but do not press for a hasty approach;
- Perform approach checklist earlier than normal (request assistance from other crew members or “Capable” persons);
- Request radar vectoring and make an extended approach – where possible to reduce workload;
- For landing **do not change seats** – fly aircraft from the position remaining crew were assigned to;
- Organize work after landing, and this shall include:
  - Depending on the situation, a change of seat for taxiing in, but only after the aircraft has come to a complete stop;
  - Having the incapacitated crew member offloaded and to the ambulance as quickly as possible;
  - Arrange for the parking of the aircraft.
  - Complete the air safety reporting and other required form.

#### **10.15.7. Single Pilot Crew Physiological Hazards Mitigation:**

The pilot needs to pass the traditional “IMSAFE” checklist (see below). This part of the 5P process helps a pilot identify and mitigate physiological hazards at all stages of the flight.

##### **I'M SAFE Checklist**

- ❖ **Illness:** Do I have any symptom?
- ❖ **Medication:** Have I been taking prescription or over-the-counter drugs?
- ❖ **Stress:** Am I under psychological pressure from the job? Am I worried about financial matters, health problems, or family discord?
- ❖ **Alcohol:** Have I been drinking within 8 hours?
- ❖ **Fatigue:** Am I tired and not adequately rested?
- ❖ **Emotion:** Am I emotionally upset?

## **10.16. CABIN SAFETY REQUIREMENTS**

### **10.16.1. General**

Depending on the aircraft type and crew composition, a member of the flight crew will be responsible for cabin safety from the time the aircraft is accepted for flight, until all the passengers have been offloaded at the end of the flight.

All Smart Cakrawala Aviation Flight Crewmembers should conduct themselves professionally at all times. This is important due to crewmembers being highly visible to passengers from boarding to disembarking. A crewmember when interacting with passengers needs to be as cordial as possible as they are representing the company at all times. The flight crew will make sure that prior to boarding passengers the cabin has been ventilated. The main cabin door will be opened prior to boarding

**Before the flight**, the commander must ensure himself that:

- The emergency equipment and the emergency lighting as mentioned in the emergency equipment location chart which is located in the document folder, operative, and properly located.
- Seats are fixed and equipped with individual belt and oxygen
- Safety cards are available to passengers.

**Before takeoff and landing** the cabin preparation must be completed as follows:

- All passengers have correctly fastened their seat belts.
- All reclining seats are in an upright position and folding tables stowed.
- All hand baggage's secured

### **10.16.2. Safe Movement of Passengers to and from the Aircraft**

The procedures for the safe movement of passengers to and from the aircraft shall include:

1. Whenever possible the aircraft should be parked in a location that avoids passenger exposure to hazardous conditions.
2. Announcements to embarking or disembarking passengers as warranted to alert them to hazardous conditions or dangers that may be encountered during embarkment or disembarkment and enroute to or from the airside entry and exit points. Passengers shall also be advised to follow any directions provided outside the aircraft.
3. Adequate guidance, and where necessary, an escort provided to passengers so as to ensure that their movements while on airside are properly controlled as follows:
  - a. Passengers are directed along the correct and safe route between the aircraft and the airside entrance point, and sufficient personnel are assigned to exercise control of passengers.
  - b. An escort is assigned to control passenger movements when the route to or from the aircraft is congested by other aircraft or vehicles.
  - c. Passengers are not exposed to hazards from aircraft operations, fueling equipment, exposure to engines exhaust, or propellers, or to hazards posed by lighting conditions, obstacles positioned along the route or unsafe surface or stairway conditions.

- d. Smoking restrictions are enforced
- e. Entertainment system headsets that decrease awareness of other traffic or limit reception of audible direction or warning signals are not worn
- f. Clearly assigning the responsibility for the opening and closing and the locking and unlocking of terminal building doors, to enable passengers to access the apron or terminal.
- g. Where conditions so warrant, the embarking or disembarking activity is suspended until a safe walking zone is prepared.
- h. Unsatisfactory or hazardous conditions are reported to the responsible authority.

**NOTE:**

These procedures shall be incorporated into training programs and training will be provided to Crew members, ground handling and passenger agent staff involved with the transfer of passengers between the terminal building and the aircraft.

### **10.16.3. First-Aids Kits (135.349 (d))**

The first-aid kits must be inspected periodically to confirm, to the extent possible, that contents are maintained in the condition necessary for their intended use; and replenished at regular intervals, in accordance with instructions contained on their labels, or as circumstances warrant.

The following should be included in the first-aid kits:

- Adhesive bandage compressors, 1- inch (16 ea)
- Antiseptic swabs (20 ea)
- Ammonia inhalants (10 ea)
- Bandage compressors, 4-inch (8 ea)
- Triangular bandage compressors, 40-inch (5 ea)
- Arm splint, non-inflatable (1 ea)
- Leg splint, non-inflatable (1 ea)
- Roller bandage, 4-inch (4 ea)
- Adhesive tape, 1-inch standard roll (2 ea)
- Bandage scissors (1 ea)
- Protective latex gloves or equivalent non-permeable gloves (1 par)
- Burn compound, 1/8-oz or an equivalent of other burn remedy (6 ea)

A list of contents in at least 2 languages (Indonesia and English). This should include information on the effects and side effects of drugs carried.

Note:

An eye irrigator whilst not required to be carried in the first-aid kit should, where possible, be available for use on the ground.

### **10.16.4. Alcoholic Beverages On Board Policy (CASR 135.123)**

No person may consume any alcoholic beverage on board on Smart Cakrawala Aviation aircraft.

## **10.16.5. Smoking on Board**

Flight Crew should enforce the No Smoking rules any time the "NO SMOKING" sign is illuminated. The NO SMOKING sign will be "ON" during whole flight.

**Smart Cakrawala Aviation prohibits fueling with passengers on board**

## **10.16.6. Electronic Devices**

Electronic devices may cause interferences with navigation or communication system of the aircraft on which they are used. To avoid any risk of interference, the use of the following electronic Devices are prohibited on board at all times:

- Cellular phones (after the aircraft doors are closed before take-off and until the aircraft doors opened after landing)
- PDAs (Personal Digital Assistants such as Palm, Blackberries even if they have flight mode capability)
- Portable televisions
- Radio receivers
- Radio transmitters
- Remotely controlled units such as toys
- Any electronic devices that have not been determined as not causing.

Interferences with aircraft systems.

Devices approved for use during all flight phases except take-off, climb, approach, final approach and landing:

- Personal audio/video devices i.e. CD, VCD, DVD, MP3 players
- Photographic devices, i.e. digital camera, video camera and portable VCR
- Computer and peripheral devices, i.e. Laptop, Electronic dictionary, Calculator
- Electronic games without remote control
- Video and audio tape recorders
- Electric shavers
- Portable personal listing devices (compact disc, cassette players)
- Portable voice recorder Devices approved for use during all phases of flight:
- Hearing aids
- Heart pacemakers

If the captain suspects the aviation system is interrupted due to passenger use of electronic devices which are not prohibited, he may request the passenger stop using the electronic device



## **10.17. PASSENGER BOARDING, CABIN INSPECTIONS AND PASSENGER BRIEFINGS (CASR 135.107)**

Before each flight conducted, all passengers will be given thorough aircraft video safety briefing. If aircraft video safety briefing not available, the safety briefing may be given orally by pilot.

Before each takeoff and landing, the PIC shall visually check that all passengers are seated and secured. Only able-bodied persons who are able to operate emergency exits shall be seated next to them. If it is not practical to conduct in-air safety briefings due to engine noise etc., these briefings may be given on the surface before engine start.

For passenger operations, the Pilot in Command shall ensure that all passengers on board the aircraft are briefed before takeoff with respect to:

1. The location and use of normal and emergency exits
2. The location and use of life vest
3. The location and use of safety belts
4. The stowage of carry-on baggage
5. Emergency equipment location and use, such as fire extinguishers, first aid kit, survival kit, etc.
6. No smoking
7. Use of portable electronic devices
8. Use of oxygen
9. Placement of seat backs in an upright position before takeoff and landing.
10. Requirements to return seatbacks and chair tables to the full upright and stowed position
11. The location, purpose, and advisability of reading the safety instruction or immediate action card.

The Pilot in Command will keep the fasten seatbelts and no smoking sign ON during the entire flight to ensure that all passengers always keep their seats, and safety belts are fastening.

A crewmember shall stand at the boarding ramp / stairs during all enplaning or deplaning operations. He or she will advise passengers to turn off and stow on their person or in their bag all electronic devices. All passengers will be informed to place all carry-ons into the bins.

Crewmembers will take this opportunity to check for passengers who appear to be intoxicated or under the influence, people with special needs and / or disabilities, passengers with lap children or in need of seatbelt extensions.

In addition, a safety briefing must be provided for passengers requiring special assistance (e.g., passengers with physical limitations, blind, deaf, wheelchair, etc.). This briefing should be customized to the passenger's disability, and include a passenger willing to assist the disabled passenger in an emergency.

After the PF has completed the Passenger Safety Briefing, a crewmember shall pass thru the cabin from the main cabin door to his / her cockpit seat. This crewmember will check to make sure that exit seat criteria have been complied with for all exit rows, all personal items are stowed, electronic devices have been turned off and stowed, passengers have their seat belts fastened, unoccupied seats have the belts



crossed so not to interfere with crewmembers in the performance of their duties, also verify that carry on items located in an emergency exit row are stowed in a way to not impede access and or egress from an emergency exit, and that the cabin is ready for taxi and takeoff.

Before each landing the Pilot in Command or First Officer shall announce that if they have removed any items to secure them at this time, to recheck that their seat belts are securely fastened and instruct them to turn off and cellular phones.

After landing and secure at the gate or dock with engines off the first officer will thank the passengers for their travel and advise them to watch their heads on their way out. Assist passengers with special needs and those with disabilities as they disembark the aircraft. A crewmember shall stand at the bottom of the ramp / stairs and maintain control of passengers until the time that the last passenger has disembarked the aircraft. After the last passenger has disembarked the aircraft it becomes the responsibility of station personnel to maintain passenger control.

For passengers who do not follow crewmember instructions, or placards prior to engine start it is important that they be reminded that it is a requirement for them to follow all instructions. Should a passenger continue to ignore crewmember requests; a Customer Service Agent should be brought to that aircraft to communicate with the passenger and if necessary remove them from the flight and provide the flight crew with corrected documentation.

For passengers who do not follow crewmember instructions or placards after engine start, during taxi, takeoff, cruise or landing it is imperative that the flight crew first fly the aircraft.

If a passenger does not cooperate during taxi the aircraft should be stopped until that passenger complies and should it become necessary the aircraft be taxied back to the departure point for further coordination with Customer Service. During any portion of flight, a crew who faces a disruptive or uncooperative passenger should land as soon as practical. For passengers experiencing a medical emergency (heart attack, seizures, allergic reactions) the crew should attempt to see if there is any other passenger who is willing and able to provide aid. They should then coordinate for medical aid at the next suitable airport and land immediately.

### 10.18. FLIGHT DECK PROCEDURES

#### 10.18.1. Manipulation of Controls (CASR 135.545)

No pilot in command may allow any person to manipulate the controls of an aircraft during flight nor may any person manipulate the controls during flight unless that person is,

- A qualified pilot employed by the company
- An authorized representative of the Director who has the permission of the pilot in command, is qualified in the aircraft, and is checking flight operations; or
- Any pilot who is qualified in accordance with the regulations and is named on the flight release, as a flight crewmember assigned to that flight.

#### 10.18.2. Crew Position

##### 10.18.2.1. Seat Occupation

Pilots should not change their station, i.e. from LH seat to RH seat or vice versa during aircraft airborne. In the presence of a third pilot, change of seat occupation is permissible at the PIC discretion.

PILOT SEAT OCCUPATION			
FIXED WING		HELICOPTERS	
LH SEAT	RH SEAT	LH SEAT	RH SEAT
Captain	First officer		Captain
Candidate Captain	Flight Instructor	Flight Instructor	Candidate Captain
Flight Instructor	Company Check Pilot	Company Check Pilot	Captain/ Candidate Captain
Company Check Pilot	Route Instructor	Route Instructor	Captain
Route Instructor	First Officer		

During all phases of flight, each crewmember of the minimum crew of two pilots shall be at his/her cockpit station with seat belt fastened, except when:

- His/her absence is due to the performance of duties in connection with the operation of the flight.
- His/her absence is for reason of personal care. In this/her case one crewmember may leave his/her cockpit station during cruise flight for a period as short as is possible.

Both pilots should occupy their seats when: take off, approach, landing, and reading check list.

##### 10.18.2.2. Use of Seat Belt by Crew

Flight crew seated on a pilot's seat shall have their seat belts fastened at all times during flight.

## **10.19. POLICY AND PROCEDURES FOR THE USE OF TAS**

### **10.19.1. General**

Some PT. Smart Cakrawala Aviation aircraft are equipped with a traffic advisory system (TAS). Use of the TAS is supplementary only and does not relieve the Pilot from seeing and avoiding all other aircraft. The TAS system does not provide Resolution Advisories and therefore cannot be relied on to provide adequate separation from other traffic. Additionally, other aircraft may not be adequately equipped and the TAS cannot “see” them. Refer to the proper AFM for specific manufacture information regarding the type of TAS equipment installed.

All AMA pilots are required to follow all ATC instructions regarding separation with other traffic and when operating in VMC to maintain adequate visual separation with all other traffic.

### **10.19.2. Prevention**

Aircraft levelling off at 1000 ft. above or below conflicting traffic may induce an RA. The TCAS system is triggered due to aircraft maintaining high vertical speeds when approaching the cleared flight level. Therefore, the pilot is recommended to reduce the vertical speed when approaching the level off altitude.

Crew members must be constantly aware that despite sophisticated radar, modern ATC techniques and sophisticated on-board equipment, accidents in these two categories have not been eliminated.

Some reasons that contribute to mid-air collisions and CFIT accidents are:

- a. Growing number of operators and airlines are increasing the number of flights globally and,
- b. Crews have become more reliant on ATC to maintain aircraft separation and terrain clearance.

Situational awareness and constant crew vigilance are two important factors in minimizing the increasing risk of mid-air collisions and accidents through CFIT.

The following procedures must be adhered to throughout all stages of all flights.

2. **LOOK** Maintain a continuous scan for other traffic with as many eyes as possible. Flight Crew should avoid unnecessary paper work and concentrate on scanning for other traffic of consequence during the climb and descent.
3. **LISTEN** Maintain a listening watch. PIC should use their discretion in the monitoring of a second frequency, bearing in mind traffic, known deficiencies of ATC, etc. Such a procedure however, should not be used when the primary frequency is difficult to read or when the traffic level would cause major interference or confusion.
4. In terminal areas if considered advisable, have an applicable second frequency monitored. Do NOT maintain watch on Company frequency or ATIS during departure, climb, descent and approach without a valid reason.

## **11. USE OF THE MINIMUM EQUIPMENT LIST (MEL)**

### **11.1. Aircraft Minimum Equipment List (MEL)**

When an aircraft system malfunction or un-serviceability is found, the pilot must be able to readily determine whether or not it is both safe and legal to dispatch the aircraft.

When an aircraft for which a MEL has been approved, and a defect is found, the operator must have, and flight crews must comply with, any conditions or restrictions contained in the MEL.

When an MEL has not been developed and approved for an aircraft type, an approved deferral procedure is available for certain items. This procedure requires a pilot to contact maintenance operations control through the OCS to determine if the defect is an airworthiness issue that must be rectified before further flight or one that can be deferred in accordance with the approved deferral procedure in the Company Maintenance Manual.

When neither of the foregoing is applicable and when an un - serviceability exists, the aircraft may not be flown until the defect is rectified and the required certifications made. However, the aircraft may be flown under the authority of a Flight Permit issued for ferry purposes to effect a repair.

When an MEL has been approved for an aircraft, the OCS will advise the pilot of the MEL items on the aircraft, however it will remain the responsibility of the PIC to review the Maintenance Logbook for recent history, and in particular for MEL items. This will ensure that he is knowledgeable with respect to deferred items and any restrictions that may apply. The PIC shall record and report all defects in accordance with the procedures detailed in the Aircraft Flight & Maintenance Log.  
For detail, see MEL Manual.

## **11.2. Maximum Repair Intervals**

All deferred maintenance items shall be repaired within the time intervals specified for the category of the item as listed below.

**Category A** - Items in this category shall be repaired within the time interval specified in the remarks column of the approved MEL.

**Category B** - Items in this category shall be repaired within three (3) consecutive calendar days (72 hours), excluding the calendar day the malfunction was recorded in the aircraft maintenance log.

**Category C** - Items in this category shall be repaired within ten (10) consecutive calendar days (240 hours), excluding the calendar day the malfunction was recorded in the aircraft maintenance log.

**Category D** - Items in this category shall be repaired within one hundred and twenty (120) consecutive calendar days (2880 hours), excluding the calendar day the malfunction was recorded in the aircraft maintenance log.

## **11.3. Extensions to Maximum Repair Intervals**

The Operations Specifications issued by the DGCA authorizes PT. Smart Cakrawala Aviation to use a continuing authorization to approve extensions to the maximum repair interval for Category B and C items, as specified in the approved MEL's, provided that the DGCA is notified within 24 hours of any extension approval.

The DGCA may refuse the use of the continuing authorization if abuse is evident.

PT. Smart Cakrawala Aviation is not authorized to approve any extensions to the maximum repair interval for Category A items, as specified in the approved MEL's.

## **12. NON-REVENUE FLIGHTS**

### **12.1. Definition**

Non-revenue flights are flight required to provide transportation and utility services needed by the PT. Smart Cakrawala Aviation operations.

## **12.2. Procedures and Limitations**

The following are Non-revenue flights provide transportation and utility services needed by the PT. Smart Cakrawala Aviation operations and details of the kind of persons who may be carried on such flights.



## **12.3. FERRY FLIGHT**

### **12.3.1. General**

On occasion it will be necessary to operate an aircraft with unserviceable equipment or systems to a maintenance base, e.g. operating an aircraft unpressurized, or with the gear extended, or in the case of three for four engines aircraft with one engine inoperative.

#### **Approval**

These flight required approval by Chief Inspector, Chief Pilot / Deputy Chief or his/her delegates and Director General of Civil Aviation. follow Requirement CASR part 91.

An application for approval should be submitted to the Chief Airworthiness / Operations

Division, DGCA and contain the following information:

1. Aircraft identification markings;
2. Location of the aircraft;
3. Date of intended ferry flight;
4. Route of intended ferry flight;
5. Which system is unserviceable;
6. Nature of system fault, if known.

The Director may approve the proposed ferry flight if he/she is satisfied that such flight can be conduct safely in compliance with the pertinent requirements of appropriate regulations.

### **12.3.2. Flight Restrictions**

It shall be the responsibility of Pilot-In-Command of the aircraft to be ferry to ensure that the following restrictions are observed in respect of such flight:

1. The aircraft shall be airworthy in every respect with the exception of the faulty system and/or its accessories.
2. All limitations in the Certificate of Airworthiness and approved operating manual shall be complied with.
3. No passengers or cargo shall be carried.
4. A minimum flight crew only shall be carried.
5. Procedures specified in the individual type Aircraft Flight Manual (AFM) or Pilot Operating Handbook (POH) shall be complied with.

## **12.4. TEST FLIGHT**

### **12.4.1. General**

CASR 91 sub part E and CASR 43 regulate that a test flight should be carried out after aircraft has undergone maintenance, preventive maintenance, rebuilding, or alteration in a manner that may have appreciably change airplane flight characteristics or substantially affected its operation in flight.

Where an aircraft has undergone a modification or repair which may have appreciably changed its flight characteristics or substantially affected its operation in flight, such aircraft shall not be returned to service until a licensed pilot, appropriately rated and authorized for the purpose, has test the aircraft and certified that its performance and flight characteristics are satisfactory.

Maintenance test flights may be authorized by the Operations Manager or a Chief Pilot / Deputy Chief. See also CMM Chapter 6, for conditions pertaining to conducting maintenance test flights.

Maintenance personnel who are required as part of their duties, must be present in the aircraft during the test flight. A satisfactory ground acceptance is required prior to the test flight.

A test flight is not required if prior to flight, ground test, inspection, or both show conclusively that the maintenance, rebuilding, or alteration has not appreciably changed the flight characteristics or substantially affected the flight operation of the airplane.

**Note : Flight tests should be conducted during daylight under VMC conditions.**

### **12.4.2. Procedures**

- Proper release from the Technical Department, specifying the purpose of the test flight is required prior to test flight.
- Test flight normally terminates at the departing station, but if due to operational reasons, it may end up at other than the departing station.
- Test flight to be carried out during daylight hours, VFR and over open water or not congested area.
- Only those manoeuvres, necessary for the tests to be conducted are allowed
- The test items sequence should follow an established Test flight Report Form published by the Technical Department.
- Engine shut down shall not be carried out below 1000 feet except in case of emergency.
- Apart from flight crew, only official observer directly concerned with the execution of test flight may be on board.
- Prior to departure, all Flight Flight crew shall be thoroughly briefed on all the work carried out on the aircraft, and the program for the test flight shall be entered by the maintenance provider on the Form Test Flight. One copy of the form shall be filed with a copy of the AFML, and kept at a suitable location at the station of departure.

- The form Test Flight and the attachments, if any, shall be completed during the test flight by the inspector resp. station mechanic, and shall be signed by the PIC at the termination of such flight. This report shall be filed with the records of the aircraft concerned

ATC must be informed of the purpose of the flight and of its profile (at least speed / altitude / time). Accordingly ATC may provide a specific control or allocate a specific area to perform the technical flight

#### **12.4.3. Personnel on Board**

During any such test flight, a designated inspector or engineer shall be aboard the aircraft. No persons except those being directly concerned with such a test flight, and no passenger/cargo shall be carried on board the aircraft.

#### **12.4.4. Deviation from Rules**

Any deviation from this standard test flight rule may only be done upon PT. Smart Cakrawala Aviation Operations Manager approval.

#### **12.4.5. Test Flight Items**

Sample of items that required test flight:

- After a major overhaul check;
- For aircraft performance test;
- After engine reinstallation;
- After replacement or removal/reinstallation of vertical stabilizer, horizontal stabilizer;
- Vibration or other conditions affecting airworthiness, which its causes not revealed through test on the ground;
- Trouble affecting airworthiness has been eliminated but result of action taken can't be checked without a test flight;
- On request or any special cases, i.e. aircraft systems check, airborne equipment check, etc.



## **12.5. DEMONSTRATION FLIGHTS**

Demonstration flight is to prove competency or check proficiency of aircraft, pilots, or both on specific contracts. Personnel may be carried:

- PT. Smart Cakrawala Aviation Personnel
- Personnel necessary for the conduct of the flight.

Remarks:

- Written permission from Operations Manager is required;
- For in flight demonstrations: only normal flight maneuvers are allowed, and no passengers may be carried. Standard minimum altitudes apply. Minimum altitude to fly over a runway for demonstration is 500 ft AGL. Program to be approved by the Director of Operations.

Weather minima:

- Weather minima as for a commercial flight;
- Flight can be VFR only.

## **12.6. POSITIONING FLIGHTS**

Positioning flight is to reposition an aircraft for operational reasons; or to move company personnel or equipment from one location to another. Personnel may be carried:

- PT. Smart Cakrawala Aviation Air Personnel
- Associates of PT. PT. Smart Cakrawala Aviation personnel with Operations Manager approval.

## **12.7. DELIVERY / RE-DELIVERY FLIGHTS**

### **12.7.1. General**

Delivery flights are flights where an aircraft is flown from the seller's facility to PT. SMART CAKRAWALA AVIATION or vice versa.

Provided all normal requirements are fulfilled, non-revenue passengers may be carried if this is not excluded on the certificate of airworthiness and certificate of registration.

Full insurance coverage must be assured. For some delivery flights, the DGCA might only issue a "ferry flight permit" in lieu of the certificate of airworthiness and the certificate of registration. This ferry permit may exclude the carriage of persons other than flight crew and engineers.

### **12.7.2. Approval**

An application in view of obtaining an approval must be submitted to DGCA. The application must contain all pertinent information for the authority to be able to determine the Delivery / Re-delivery Flight can be conducted safely in compliance with the pertinent requirements of appropriate regulations.

### **12.7.3. Crew Requirements**

For Delivery/Re-delivery Flight, the designated PIC must be trained and must have demonstrated his competence to handle the aircraft in all maneuvers associated with a flight of this type.

Flight crew shall be trained and obtain qualification prior to operate on difficult or high terrain routes, and into destinations: Chief Pilot / Deputy Chief, in consultation with Operation Director may impose specific training or experience requirements for any Delivery/Re-delivery Flight.

Instructor or check airman may operate in to any area prior qualification, provided he has brief himself by using published means such as INDOAVIS Charts, applicable AIP and others as may be available to obtain all relevant and pertinent data for that route.

It must be the responsibility of PIC of the aircraft to be Delivery/Re-delivery Flight to ensure that the following restrictions are observed in respect of such flight:

- The aircraft must be airworthy in every respect with the exception of the faulty system and/or its accessories;
- All limitations in the AFM / POH and Operations Manual Parts A/B/C must be complied with;

- Any additional specific procedures or limitation required by the Authority must be complied with.

## **12.8. TRAINING FLIGHTS**

Training flights, both for the purpose of periodic tests, renewal of ratings, and for instruction in flying. Full procedures are contained in OM Part D.

1. the pilot(s) under test
2. the training Captain/Examiner performing the test
3. an observer performing duties in connection with the test



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**13. OXYGEN REQUIREMENT (Refer to CASR 135.335 Oxygen Equipment Requirement.) (91.211)**

Unpressurized aircraft at altitudes prescribed is equipped with enough oxygen dispensers and oxygen to supply the pilots under 135.535(a) and to supply, when flying

- (1) At altitudes above 10,000 feet through 15,000 feet MSL, oxygen to at least 10 percent of the occupants of the aircraft, other than the pilots, for that part of the flight at those altitudes that is of more than 30 minutes duration; and
- (2) Above 15,000 feet MSL, oxygen to each occupant of the aircraft other than the pilots

## **14. DANGEROUS GOODS**

### **14.1. GENERAL**

Dangerous Goods are articles or substances, which are capable of posing a significant risk to health, safety, or to property when transported by air and which are classified according to Dangerous Goods Regulation (DGR - IATA Resolution 618, Attachment A). The carriages of dangerous goods have been regulated as mentioned in Annex 19 ICAO Regulation and these restrictions and instructions are contained in the IATA DGRs.

The purpose of this chapter is to provide direction and assistance to all company personnel involved in the handling, offering for transport and transport of dangerous goods by air.

Dangerous goods are divided to nine hazard classes and some hazard classes are further subdivided into hazard divisions due to the wide scope of the class. The nine hazard classes and their divisions are listed below. The order in which they are numbered is for convenience and does NOT imply a relative degree of danger.

**Note:**

**For transport Dangerous Goods and Medical Evacuation needs DGHM approval.  
For detail see DG manual.**

## **14.2. COMPANY RESPONSIBILITIES**

### **14.2.1. Specific Responsibilities**

Before any package or over pack of dangerous goods is offered for air transport, the Company is complying with the following specific responsibilities:

1. The Company provides such information to his employee as will enable them to carry-out their responsibilities with regard to the transport of dangerous goods by air.
2. The Company ensures that the articles or substances are NOT prohibited for transport by air.
3. The articles or substances must be properly identified, classified, packed, marked, labeled and documented.
4. Before a consignment of dangerous goods is offered for air transportation, all relevant personnel involved in its preparation must have received training to enable them to carry out their responsibilities. Where the Company does NOT have trained staff for one reason or another, the contract personnel may be interpreted as applying to those employed to act on Company's behalf and undertake the responsibilities in the preparation of the consignment.

### **14.2.2. Display Of Dangerous Goods Notices**

Notices giving information about the transportation of dangerous goods shall be prominently display in sufficient numbers as a minimum, in the following areas as applicable: Cargo acceptance areas.

### **14.2.3. Security Screening**

All persons engage in the security screening of flight crew must be trained persons and capable of identifying prohibited dangerous goods in flight crew. This requirement also applies to non-company personnel contracted to provide security-screening services.

### **14.2.4. Company Dangerous Goods Consignments**

The preparation and offering for transport of a dangerous goods consignment either for road or air transport, shall comply with the applicable training, classification, packaging, labeling, marking, documentation and safety requirements. The receiving and handling of a dangerous goods consignment, when the Company is the consignee shall comply with the applicable training, recognition, handling, safety and reporting requirements.

## **14.3. HANDLING**

### **14.3.1. Acceptance Procedures**

All dangerous goods consignments and accompanying documentation offered for transport must be checked for compliance with the applicable regulatory requirements utilizing the Dangerous Goods Acceptance Checklist as in Damaged shipments will NOT be accepted.

When dangerous goods consignment does NOT meet the requirements, it shall be refused for transport.

A copy of the completed company dangerous goods acceptance checklist outlining the reason(s) for refusal shall be given to the person offering the consignment and the original retained by the Company.

When it is suspicious that the contents of a consignment may contain dangerous goods, cargo acceptance employees shall seek confirmation from the shipper that the consignment does NOT contain dangerous goods.

### **14.3.2. Storage Within The Facility**

Under NO circumstances will the Company store explosives at, or in any company facility.

### **14.3.3. Loading of Dangerous Goods On Aircraft**

All dangerous goods shall be inspected immediately before loading to determine it is free of leakage, spillage or damage. In the case of leakage, spillage or damage, the dangerous goods shall NOT be loaded on board the aircraft.

As appropriate, the Pilot-In-Command shall be given as early as practicable before departure, written information concerning the dangerous goods loaded on board the aircraft. The information will also include confirmation that there was no evidence of damage or leakage at the time of loading. A shipper Declaration of Dangerous Goods shall accompany all shipments except where exempted by the IATA regulation. The appropriate Company Dangerous Goods Pilot notification Form shall be used.

At a minimum, dangerous goods, which might react dangerously with one another, must be stowed onboard the aircraft according to the segregation tables found in the IATA regulations, and in particular:

1. DRY ICE shall NOT be stored near live animals or carried in the same aircraft compartment with live animals,
2. FLAMMABLE SOLIDS AND OXIDIZERS shall NOT be placed next to, or in a position to allow contact with a package containing a CORROSIVE.
3. POISON shall NOT be stored next to or in the same compartment as in live animals or OPERATIONS STAFF/ Pilot self dispatch stuff;
4. RADIOACTIVE MATERIAL separation requirements are listed in the IATA Dangerous Goods regulations.
5. CRYOGENIC LIQUIDS shall NOT be carried in the same compartment as live animal

Dangerous goods shall be protected from being damaged during flight. They shall also be secured to prevent movement during flight, which would change the orientation of the package.

#### **14.3.4. Unloading Dangerous Goods from Aircraft**

All dangerous goods when being unloaded from the aircraft shall be inspected for signs of damage or leakage. If evidence of damage or leakage is discovered, the dangerous goods consignment shall be detained. The position where the dangerous goods were loaded onboard the aircraft shall be inspected.

#### **14.3.5. Contracted Service**

All contracted service with the Company shall comply with all regulatory requirements for handling, offering for transport or transporting dangerous goods and the applicable procedures set out in this manual.

#### **14.3.6. Record Keeping**

Copies of the shipping and related documents shall be retained for 6 (six) months.

## **14.4. REPORTING**

### **14.4.1. Undeclared or Misdeclared Dangerous Goods**

When undeclared or misdeclared dangerous goods are discovered in cargo, a report must be made immediately to Director Operation and Directorate General of Civil Aviation, or the National Authority of the Country if NOT in Indonesia.

### **14.4.2. Dangerous Goods In Flight Crew Baggage**

When dangerous goods NOT permitted for carriage by flight crew or flight crew carried baggage are discovered, a report must be made to Operation Manager and Directorate General of Civil Aviation, or the National Authority of the Country if NOT in Indonesia.

### **14.4.3. Lost, Stolen or Misplaced Dangerous Goods**

When any part of a dangerous goods consignment containing an explosive, infectious substance or radioactive substance is discovered as being lost, stolen or misplaced, the discovery shall be immediately reported to the company security, airport authority or local police

### **14.4.4. Dangerous Occurrence**

A dangerous occurrence is a transportation or handling occurrence where:

1. There is a release of dangerous goods that represents a danger to health, life, property or the environment;
2. A bulk containment of dangerous goods is damaged;
3. Class 7 dangerous goods are involved;
4. There is an explosion of fire involving dangerous goods.

For air transport, there is minimum quantity of dangerous goods required to qualify as a dangerous occurrence.

A dangerous goods accident means, an occurrence other than a dangerous goods accident associated with and related to the transport of dangerous goods on board an aircraft, which result in injury to a person, property damage, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has NOT been maintained. An occurrence relating to the transport of dangerous goods that seriously jeopardize an aircraft or its occupants is also deemed to be a dangerous goods incident.

At the time of a dangerous occurrence, any company employee, or any person acting on behalf of the company, who has the charge, management or control of the involved dangerous goods shall immediately report to the Company Security, Safety And Quality Manager and Directorate General of Civil Aviation.

A Dangerous Occurrence Report (DOR) must be completed by the Pilot-In-Command and forwarded to the Company security and Safety And Quality Manager who will

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forward it within 30 (thirty) days of the dangerous occurrence to the Directorate General of Civil Aviation.

**FOR DETAIL OF THE DANGEROUS GOODS SEE DANGEROUS GOODS MANUAL  
AS SUB MANUAL THIS PART**

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## **14.5. INSTRUCTIONS ON THE CARRIAGE OF COMPANY MATERIAL**

### **14.5.1. General**

There is no restriction of the carriage of employees on an aircraft carrying dangerous goods which are permitted on a passenger aircraft, providing the requirements of the Technical Instructions / IATA DGRs or the approval referred in section 9.2.1 are complied with.

When an aircraft is carrying dangerous goods, which can only be carried on a cargo aircraft, company material can also be carried provided they are in an official capacity.

It is intended that this should be interpreted as meaning they have duties concerned with the preparation or undertaking of a flight or on the ground once the aircraft has landed, although not necessarily in connection with an aircraft.

### **14.5.2. Company Policy**

Notwithstanding the above, it is company policy that no person other than crew members, fare paying passengers or passengers nominated by the aircraft contractor may fly in company aircraft without the express permission of the Operations Manager or assigned deputy.



## **14.6. CONDITIONS UNDER WHICH WEAPONS AND SPORTING WEAPONS MAY BE CARRIED**

### **14.6.1. Weapons and Ammunitions (CASR 135.99)**

Weapons and munitions can only be carried provided an approval to do so has been

granted by all the States concerned before a flight. They must be carried in the aircraft in a place which is inaccessible to passengers during flight and, in the case of firearms, unloaded, except as specified below.

In exceptional circumstances weapons and munitions may be carried other than in an inaccessible place on the aircraft and may be loaded, provided an approval to do

so has been granted by all the States concerned before a flight. These exceptional circumstances are intended primarily to permit the carriage of law enforcement officers, protection officers, etc.

The ammunition should be placed in a separate baggage compartment or in the cockpit. In aircraft without a cargo pod the firearm should be secured in the cockpit

area or a baggage compartment inaccessible by the passengers during flight and the

ammunition placed in a separate compartment. CASR 135.99 states that no ammunition may be carried in the passenger cabin.

Other items such as knives, hatchets, swords, etc. are not permitted in the passenger cabin, they should be secured in the cargo pod, cockpit, or other baggage

compartment in-accessible in flight by the passengers. If any Smart Cakrawala Aviation staff member notices a passenger with a weapon, they should immediately inform a member of the ground staff, or the PIC.

**NOTE:**

The PIC must be notified before a flight if weapons or munitions are to be carried on the aircraft.

### **14.6.2. Sporting Weapons and Ammunition**

Sporting weapons and ammunition for such weapons may be carried without an approval from an Authority provided they are stowed in a place on the aircraft which is inaccessible to passengers during flight and, in the case of firearms, unloaded. All reasonable measures must be taken to ensure the operator is made aware of the intended carriage of sporting weapons and ammunition.

With the agreement of the Authority sporting weapons and ammunition may be carried other than in an inaccessible location on an aircraft if it has been accepted that it is impracticable so to do, subject to any conditions stipulated by the Authority.

Ammunition for sporting weapons may be carried in passengers' checked baggage, subject to certain limitations, in accordance with the Technical Instruct.

## **15. SECURITY**

### **15.1. RESPONSIBILITIES**

The management of PT. Smart Cakrawala Aviation is responsible for overall policy, including security issues. Implementation of security submitted to the Safety and Security Manager who has direct access to the Board of Directors;

The Board of Management, consisting of Managing Director, Safety And Quality Manager, Operation Manager, Technical Manager, Finance and HRD, responsible for enabling and coordinative body associated with Top of Management;

Safety And Quality Manager is responsible for:

1. Development, implementation, and evaluation of Aviation Security Manual as necessary;
2. Training of security personnel;
3. Reporting to the Board of Directors and coordination with other agencies on security matters
4. Safety And Quality Manager's duties supported by Aviation Safety Officer, Pilot-In-Command (PIC) in the case of a threat to aircraft and consult with the Company.

## **15.2. SECURITY POLICY**

Establishment purposes the standard operational of aviation security. Handling is very specific, measurable, and realistic. Short term and long term plan should be defined and prioritized against illegal actions.

PT. Smart Cakrawala Aviation's Security Policy that set in the Security Program is:

1. Identifying, measuring the recommendation for security risks for companies and resources, such as equipment, financial assets, including customer information and, staff and the community;
2. Involving and implement procedures and systems to ensure that the risks and threats, minimized to an acceptable level with the most economical way;
3. Civil Aviation Safe guard in general and PT.Smart Cakrawala Aviation operations particularly against act so flawlessness;
5. Safety and Security personnel, flight crew, ground personnel and the general public is a key objective in all matters relating to the security policy;
6. Provide Security Program, education for all personnel;
7. Prevent damage and personnel injury resulting from operational.

## **15.3. COMMUNICATIONS**

Communication Network set: radio, telephone and fax that includes all stations of PT. Smart Cakrawala Aviation;

1. Communication Network main used to exchange news, and operations;
2. In terms of the security in formations, the news should be classified into the secret, ordinary, and limited to a particular party;

### News Exchange

- a. SECRET: through a special communication channel or personally delivered by courier authorized to preserve confidentiality;
- b. LIMITED: through a special communication channel;
- c. UNLIMITED: through the means of communication available

In the event of violation of the law against such company hijacking or a bomb threat, the communication will be done through a special communication channel and categorized.

In conjunction with the Director General of Civil Aviation (DGCA), the initial report must be sent in less than an hour and methods of coordination and communication is done directly or through the means of communication available;

Communication to DGCA's Director is responsibility of Safety And Quality Manager

## **15.4. INCIDENT REPORT**

1. Everyone in the company is aware of any incidents of security on the flights of PT. Smart Cakrawala Aviation shall report to the management of PT. Smart Cakrawala Aviation, aircraft crew or airport security personnel;
2. The meaning of the security incident is any kind of category of unlawful acts such as:
  - a. Acts of violence against a person onboard aircraft in flight is possible to compromise the safety of the aircraft;
  - b. Destroying or damaging the aircraft will be operated; causing the aircraft can NOT fly or endanger the safety during flights;
  - c. Placing tools or materials in anyway aircraft so that the aircraft can NOT fly, damaged, destroyed or endanger the safety during flights;
  - d. Destroy or impair or interfere with the operation of air navigation facilities which resulted in endangering the safety of flights;
  - e. False communication of information that resulted in harm to the safety of flights, such as a bomb-threat;
  - f. Take action against the law, along with using the equipment, substances or materials or weapons.
3. The flight crew who received an incident report should conduct a risk assessment (risk assessment) if there port is positive or negative;
4. If there port is positive, the incident must be reported immediately to:
  - a) The nearest of Head Office of the Airport Authority;
  - b) Head of the airport;
  - c) Safety And Quality Manager
  - d) If needed, it can directly coordinate with the nearest Police (Remote Area).

If the negative incident report, the flight crew can ignore it and make a written report to Safety And Quality Manager

5. Safety And Quality Manager is received reports of aviation security incident must immediately report to the Board of Directors of PT. Smart Cakrawala Aviation, for the next Director of PT. Smart Cakrawala Aviation report orally to the DGCA on the first occasion;
6. After the incident can be resolved, Safety And Quality Manager make a report in writing to the Director General of Civil Aviation (DGCA) by using the form provided (as an attachment).

**FOR DETAIL OF THE AIRCRAFT OPERATOR SECURITY PROGRAM SEE AIRCRAFT OPERATOR SECURITY PROGRAM AS SUB MANUAL THIS PART**

## 16. HANDLING OF ACCIDENTS AND OCCURRENCES

### 16.1. DEFINITIONS

#### A. Accident

The following is the ICAO definition of an Accident:

An occurrence associated with the operation of an aircraft which takes place between the time when any person boards the aircraft with the intention of flight and such time as all persons have disembarked there from, in which:

1. Any person suffers death or serious injury while in or upon the aircraft or by direct contact with any part of the aircraft (including any part which has become detached from the aircraft) or by direct exposure to jet blast, except when the death or serious injury is from natural causes, is self-inflicted or is inflicted by other persons or when the death or serious injury is suffered by a stowaway hiding outside the areas normally available in flight to the passengers and members of the crew of the aircraft, or
2. The aircraft incurs damage or structural failure, other than:
  - a) Engine failure or damage, when the damage is limited to the engine, its cowling or accessories;
  - b) Damage limited to propeller, antennae, fairings, small dents or punctured holes in the aircraft skin, which adversely affects its structural strength, performance or flight characteristics and which would normally require major repair or replacement of the affected component, or
3. The aircraft is missing or is completely inaccessible or
4. Significant damage is caused to the property of Smart Cakrawala Aviation or any third party.

**NOTE 1 :** 'Significant' damage in this respect may be taken to mean any damage caused which may be subject to an insurance claim.

**NOTE 2 :** For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified as a fatal injury by ICAO

**NOTE 3 :** An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

#### B. Serious Injury

Serious injury means an injury which is sustained by a person in a reportable accident and which:

1. Requires his stay in hospital for more than 48 hours commencing within seven days from the date on which the injury was received.
2. Results in a fracture of any bone (except simple fractures of fingers, toes or nose).
3. Involves lacerations which cause nerve, muscle or tendon damage or severe hemorrhage.
4. Involves injury to any internal organ.
5. Involves second or third degree burns or any burns affecting more than five per cent of the body surface.
6. Involves verified exposure to infectious substances or injurious radiation.

#### C. Incident

An occurrence, not covered by the definition of Aircraft Accident above, which:

1. Has jeopardized the safety of passengers, crew or aircraft but which has terminated without serious injury or substantial damage and/or
2. Under slightly varied circumstances, may have jeopardized the safety of the passengers, crew or aircraft, or may have resulted in an aircraft accident and/or

3. Was caused by damage to, or failure of, any major component, not resulting in substantial damage, or serious injury, but which required the repair or replacement of that component.

This includes but is not limited to:

- a) A precautionary or forced landing without subsequent substantial damage to the aircraft or third parties, nor serious injury to the crew, passengers or other persons.
- b) An engine failure or stoppage which does not consequently result in substantial damage nor serious injuries.
- c) An external part of the aircraft becoming detached in flight, not causing substantial damage nor serious injury to a third party.
- d) Instances of contaminated fuel.
- e) Absence of fuel quality control.
- f) A forced, unscheduled, change of flight plan caused by the failure of aircraft instruments, navigation aids or other technical failure.
- g) Obstruction on airfield, landing platform or other landing site.
- h) Bird strikes, Airprox, In-flight Icing.
- i) Serious difficulty caused by faulty procedures or lack of compliance with applicable procedures or failure of ground facilities or misunderstanding or misinterpretation of any clearance, instruction or other information issued by Air Traffic Control
- j) Technical failures, defects or damage, which have or could have jeopardized the safe use of the aircraft.

Interpretation of the phrase:

‘which have or could have jeopardized the safe use of the aircraft’.

In this context it is company policy to classify an occurrence as an incident, whenever the Emergency Check List (ECL) has been consulted.

It must be realized that an Incident Report is never intended to apportion blame, but to prevent a similar incident recurring when the consequences might be more serious.

Smart Cakrawala Aviation however, would take a very serious view of any failure to report any incident, which subsequently came to light.

## **D. Serious Incidents**

A serious incident is defined as an incident which:

- a) Has jeopardized the safety of passengers, crew or aircraft and narrowly avoids being an accident (by good handling, good luck, etc.)
- b) Has serious potential technical or operational implications, or
- c) May result in formal disciplinary action against aircrew or engineers.

The decision to classify an incident as ‘Serious’ will normally be made by Director of Operations or Chief Pilot. This decision must be made as soon as possible after the occurrence and before the crew or aircraft fly again.

## **E. Occurrences**

For Company reporting procedures an occurrence is defined as anything, not classified above as an accident or incident, which happens to the aircraft outside of its normal operating parameters, or which gives cause for concern to its crew, maintenance staff or ground crew. This also includes during towing, jacking, scheduled and unscheduled

maintenance, ground-runs, air-tests and when the aircraft is parked and unattended.

Examples of occurrences include but are not limited to:

- a. Any exceedance of aircraft limitations.

- b. All cases of the aircraft underperforming against measured parameters i.e. Power assurance.
- c. Spurious or false 'warning' or 'caution' indications.
- d. All 'chip' indications not reported as incidents.
- e. Fuelling irregularities including,
  - 1. Water detected
  - 2. Cladsporium Resinae (Fungi) or mould detected
  - 3. Aircraft fuel gauge indications
  - 4. Fuel leaks and spills
  - 5. Filler caps left off or incorrectly fitted
  - 6. Lack of bonding during fuelling observed
- f. Incorrect weight and balance for whatever reason.
- g. FOD observed on or around the aircraft and the maneuvering area.
- h. Damage caused inside the aircraft by passengers.
- i. Cowlings or panels opening, but not detaching, during taxi & flight.
- j. Control restrictions

Also, if reference is made to the 'Abnormal procedures' of the pilot checklist or an entry is made in the Flight Maintenance Log, an occurrence report should be raised.



## **16.2. HANDLING OF ACCIDENTS**

### **16.2.1. Pilot Post Accident Procedures**

Immediately after an accident on land, or a ditching, and following the evacuation of the passengers to either a sheltered location upwind of the aircraft, or into the liferaft, the pilot should carry out, or delegate the following duties to either a crew member or a selected passenger:

1. Subject to safety and the prevailing situation the aircraft should be left in a safe condition with fuel off and aircraft batteries disconnected and equipment, such as first aid kits, survival packs and fire extinguishers, removed.
2. A headcount should be made to account for all persons on board at the time of the accident. In the event of a person, or persons being unaccounted for, action should be taken to recover them or locate their whereabouts.
3. The needs of any injured person should be administered to as far as is possible, such persons should be made as comfortable as is practicable.
4. The bodies of any victims should be decently set apart and covered.
5. Activate the distress beacon and establish feasibility of using aircraft radio equipment. Prepare pyrotechnics for immediate use. Select, mark and prepare a rescue aircraft landing site. If a site is not available, lay out appropriate search and rescue signals.
6. If people, dwellings, or communications facilities are very close to the scene of the accident, consider sending for assistance, taking into account the local situation, distress messages, transmitted and received, and the local SAR facilities.
7. If rescue is likely to be delayed for reasons of distance, or failing daylight, prepare suitable shelters, distribute available rations of food and water. If necessary, ascertain the availability of fresh water in the immediate vicinity of the accident.
8. Subsequent to rescue and subject to the location of the accident, the police should be informed and assistance sought in the placing of guards on the aircraft.

Alternatively, consideration should be given to hiring local watchmen.

### **16.2.2. Aircraft Accident Reporting**

Following an accident or incident involving Smart Cakrawala Aviation aircraft the PIC shall complete an Mandatory Occurrence Report, in addition to complying with the laws and regulations of the country of registration and the country in which the accident occurred.

### **16.2.3. Accident Reporting Procedures**

Whenever an accident occurs the crew member not incapacitated must follow this sequence of reporting actions:

1. Contact Smart Cakrawala Aviation Operations immediately using any means possible, in accordance with the format prescribed below.
2. If appropriate, telephone Smart Cakrawala Aviation Operations in accordance with the requirements detailed below.
3. Where necessary notify the competent authority of the country in which the accident occurs and / or in which the aircraft is registered. The accident message should indicate whether such notification has been made or is intended.
4. Complete and dispatch the Smart Cakrawala Aviation Mandatory Occurrence Report form as soon as possible but, in any case,, within 72 hours of the accident. Where items of the report cannot be completed due to lack of information, they

should be marked 'to be completed' and the missing information forwarded when obtained, rather than delaying the report.

- Accident/Incident Reports must be handed over to the operations officer on duty as soon as possible after the accident.
- Accident/Incident Report must be made out by the PIC (if possible).
- Accident/Incident Report must be written with a black or blue ball-point or soft-point pen.
- Accident/Incident Reports shall be clearly written and the English language shall be used.

#### **16.2.4. Responsibility for Accident Reporting**

After any accident, it is the responsibility of the PIC, or Safety And Quality Manager, or Director of Operations, or the Chief Pilot (in that order) to ensure that the appropriate reporting procedures are followed without delay. Accidents must be notified to Smart Cakrawala Aviation Operations via the quickest means and using **Occurrence Report Form**.

The Chief Pilot will issue to each unit standing instructions regarding any requirement to notify the appropriate and local authorities and customers representatives. A copy of these instructions should be incorporated in the Local Base Instructions.

#### **16.2.5. Follow-Up Information**

In view of possible delay in the arrival of the Occurrence Report, the person responsible shall provide the Director with follow-up information either by telephone or fax. This should include:

1. Additional information which may come to light or updating earlier information already sent.
2. Any apparent mechanical failure discovered.
3. The form of investigation which may be taking place and aspects which are receiving special consideration.
4. Recommendation regarding the pilot's return to duty as prescribed in 'Flying after an Accident' below.

It is emphasized that this follow-up procedure is an essential requirement to enable the Director to decide on what further action is appropriate.

#### **16.2.6. Reporting By Telephone**

In the event of an accident in which fatalities or serious injuries are sustained or persons are missing or serious adverse publicity may result, the Director of Operations and Safety And Quality Manager must be informed, day or night, without delay.

#### **16.2.7. Completing The Occurrence Report Form**

All sections of the report shall be completed. Statements need not be restricted simply to the questions which are suggested therein.

The PIC, or Director of Operations, or the Chief Pilot, in case the former are incapacitated, will complete an Accident/Incident Report for the record listing in as far as possible, the following information:

– Refer to Mandatory Occurrence Report below



### Occurrence Report

1. Type of Occurrence <i>Tipe Kejadian</i>	Serious Incident <i>Insiden Serius</i>			Accident <i>Kecelakaan</i>		
2. Aircraft Identification <i>Identitas Pesawat</i>	Manufacturer <i>Pabrikan</i>					
	Model/Type <i>Model/Tipe</i>					
	Registration <i>Registrasi</i>					
	Serial Number <i>Nomor Seri</i>					
3. Aircraft Operator <i>Operator Pesawat Udara</i>	Aircraft Owner <i>Pemilik Pesawat Udara</i>					
	Aircraft Operator <i>Operator Pesawat Udara</i>					
4. Crew and passengers Identification <i>Identitas Awak dan Penumpang</i>	Pilot-In-Command qualification <i>Kualifikasi Pilot - In - Command</i> : (ATPL / CPL / PPL / Other)					
	Flight crew nationality <i>Kebangsaan Awak Pesawat</i> :					
	Passengers nationality <i>Kebangsaan Penumpang</i> :					
5. Occurrence Time <i>Waktu Kejadian</i>	Local Time <i>Waktu Setempat</i>			UTC		
	Date <i>Tanggal</i>					
	Time <i>Jam</i>			WIB / WITA / WIT		
6. Flight Plan <i>Rencana Penerbangan</i>	Last Point of Departure <i>Tempat Keberangkatan</i> :					
	Point of Intended Landing <i>Tempat Tujuan Pendaratan</i> :					
7. Type of Flight Operation <i>Tipe Penerbangan</i>	Commercial Aviation <i>Penerbangan Komersil</i>		Scheduled <i>Berjadwal</i>		Passenger <i>Berpenumpang</i>	
	General Aviation <i>General Aviation</i>		Non-Scheduled <i>Tidak Berjadwal</i>		Cargo <i>Muatan Barang</i>	
	Other / Lain-lain				Other / Lain-lain	
8. Presence and description of dangerous goods on board <i>Jenis Barang Berbahaya, di dalam pesawat udara</i>	Yes (please describe) <i>Ada (sebutkan)</i>					
9. Damage of the aircraft so far as is known <i>Kerusakan Pesawat udara yang diketahui</i>	None <i>Tidak ada</i>					
	Destroyed <i>Hancur</i>					
	Substantial <i>Rusak Berat</i>					
	Minor <i>Rusak Ringan</i>					
10. Site of Occurrence <i>Tempat Kejadian</i>	Latitude <i>Lintang</i> : N/S U/S					
	Longitude <i>Bujur</i> : W/E B/T					
	Physical characteristics and reference to some easily defined geographical point (near river, mountain etc) <i>Karakteristik lokasi dan titik acuan geografis sebagai referensi (dekat sungai, gunung dsb)</i>					
11. Number of Crew and Passenger <i>Jumlah Awak dan Penumpang</i>	Person on board are ..... pilot(s), ..... attendant(s) and ..... passenger(s) <i>Jumlah orang ..... pilot, ..... pramugari dan ..... penumpang</i>					
	Fatal <i>Meninggal</i>		crew <i>awak</i>		passenger <i>penumpang</i>	
	Serious Injury <i>Cedera Serius</i>		crew <i>awak</i>		passenger <i>penumpang</i>	
	Minor Injury <i>Cedera Ringan</i>		crew <i>awak</i>		passenger <i>penumpang</i>	
Reported by <i>Dilaporkan oleh</i>						
Place <i>Tempat</i>						
Name <i>Nama</i>						
Position <i>Jabatan</i>						
Sign <i>Tanda Tangan</i>						
Date <i>Tanggal</i>						

**Note:**

Please report immediately, with the minimum delay and by the most suitable and quickest means available to:

Laporkan, sesegera mungkin dengan sarana yang tersedia, kepada:

a. Directorate General of Civil Aviation cq. Directorate of Airworthiness and Aircraft Operation and / or Directorate of Air Navigation and / or Directorate of Airport  
Direktorat Jenderal Perhubungan Udara cq. Direktorat Kelaikan Udara dan Pengoperasian Pesawat Udara dan / atau Direktorat Navigasi Penerbangan dan / atau Direktorat Kebandarudaraan  
Gedung Karya  
Jl. Merdeka Merdeka Barat No.8 Jakarta 10110 Indonesia  
Telp.(62-21) 3506664,3506665  
Fax. (62-21) 3506663  
Email: [hubud@dephub.go.id](mailto:hubud@dephub.go.id)

b. National Transportation Safety Committee Komite Nasional Keselamatan Transportasi  
Gedung Merpati Nusantara  
Jl. Angkasa Kemayoran – Jakarta Pusat  
Phone: +6221-65867510, +6221-65867511, +6221-65701184  
Fax: +62-21-65701184, +6221-65867512  
Email :[knkt@dephub.go.id](mailto:knkt@dephub.go.id) [air.knkt@dephub.go](mailto:air.knkt@dephub.go).

#### **16.2.8. Occurrence Report Distribution**

Mandatory Occurrence Report shall be addressed to the Safety And Quality Manager, with a copy held on file on the Base. The completed Report should be dispatched to the authorities within 3 days of the accident.

#### **16.2.9. Flying after an Accident**

After being involved in an accident / incident, the crew shall not carry out further flying duties.

Crew members shall remain on site, unless to undergo medical treatment or examination, and may not be scheduled for flying duties until authorized by the DGCA

after the preliminary findings of the investigation are known or apparent.

#### **16.2.10. CVR and FDR retention**

After any accident or reportable occurrence (ref. 16.2.7) or whenever deemed necessary by the authorities, the CVR and FDR must be retained for a period of 60 days, unless otherwise directed by the Authority. It is only the investigating authority through the Chief Inspector who then can release the CVR and FDR to service.

## **16.3. HANDLING OF INCIDENTS**

### **16.3.1. Pilot Post Incident Procedures**

Immediately after an incident on land, the pilot should notify Smart Cakrawala Aviation Operations according to 16.3.2.

### **16.3.2. Incident Reporting Procedures**

The pilot involved is to complete the Accident/Incident Report Form as soon as possible after the Incident. The Safety And Quality Manager, Director of Operations, Maintenance Manager should add the report of their local investigation together with their comments and recommendations stating any immediate preventative action which may have been taken.

The completed Report should be dispatched to the authority within 3 days of this occurrence.

The Safety And Quality Manager or his representative will classify occurrences upon receipt of the report.

### **16.3.3. Informing Base of Occurrences**

The following is intended as guidance to PIC's experiencing a technical malfunction or other occurrence away from base.

- a. In all cases where the nature or extent of a problem is such that the flight cannot be continued normally, advice shall be sought from Maintenance staff at the operating base. Whenever possible, the first point of contact should be with the duty Operations Officer, who will then alert the appropriate personnel for consultation.
- b. Whilst it is difficult to formulate a hard and fast rule to cover every possible situation, the general principle shall apply that unless the aircraft is judged serviceable to public transport standards it shall not be ferried back to base until the problem has been fully researched.
- c. It follows that a return to base 'without passengers' will not normally be undertaken and then only when specifically authorized by Director of Operations and with the concurrence of the aircraft PIC who will retain at all times the ultimate 'NO-GO' decision.
- d. Because of the attendant risk of misunderstanding due to poor communications, crews stranded away from base should arrange to discuss their problem by a radio/telephone link call if possible having alerted the relevant base personnel to standby through radio, if possible.
- e. In the case of crews experiencing in-flight unserviceability which in the opinion of the PIC can be rectified on return to base, the symptoms must still be reported on VHF/HF. This will also enable the Maintenance Department to prepare themselves to rectify the defects upon the return.
- f. It is mandatory that crews inform their operating base of occurrences such as birdstrikes, minor illnesses etc. as well as technical defects before continuing the flight, and if it is impractical, as soon as possible after landing.

### **16.3.4. Investigation / Rectification Away From Base**

There are occasions following a warning or minor malfunction away from base where a pilot may carry out an investigation or minor rectification under the instructions of base engineers, e.g. examination and cleaning of a magnetic plug following a chip warning. In such cases details to be given in the report comprise the following:

- Date and time of occurrence
- Type and registration of aircraft

- Name of PIC
- Location at which inspection/rectification was carried out
- Brief details of defect and action carried out
- Brief details of engineering action following flight to maintenance base.

### **16.3.5. Supporting Information**

Where they may be relevant, the following documents and information should accompany Occurrence Reports:

- Photographs of the aircraft and area
- Position of cockpit controls and switches
- Sketch map of the area
- Passenger/eye witness report
- Post accident medical reports in respect of crew and passengers
- Copy of the Standard or Multiple Sector Load Sheet
- Any relevant extracts from local legislation and/or Base instructions.
- Weather Report
- Passenger seat plan in the aircraft
- Extract from radio log
- Engine power checking data for the 30 days preceding the accident or incident
- Post-accident procedures carried out.



## **16.4. OCCURRENCE REPORTING**

### **16.4.1. Objectives**

- a. To ensure that the authority is advised of hazardous or potentially hazardous incidents and defects referred to as 'Occurrences'.
- b. To ensure that knowledge of these occurrences is disseminated so that other persons and organization may learn from them.
- c. To enable an assessment to be made by those concerned, of the safety implications of each occurrence, both in itself and in relation to previous similar occurrences, so that they may take or initiate any necessary action.

The overall objective of occurrence reporting is to use the reported information to improve the level of flight safety and not to attribute blame.

### **16.4.2. Airprox, Birdstrike, Volcanic Ash And Lightning Strike Reports**

Airprox, Bird strike, Volcanic Ash and Meteorological phenomena reports are to be reported to the authority. In the case of bird strikes, damage photographs should be submitted if possible. A duplicate copy is to be sent to the Operations Department. The PIC shall inform immediately the appropriate ground station whenever a potential bird hazard is observed. The PIC shall submit a written Report after landing whenever an aircraft, for which he is responsible, suffers a bird strike.

### **16.4.3. Irregularities of Ground and Navigational Facilities and Hazardous Conditions**

The PIC shall notify the appropriate ground station as soon as practicable whenever a potentially hazardous condition such as:

- a. An irregularity in a ground or navigational facility; or
- b. A meteorological phenomenon; or
- c. A volcanic ash cloud; or
- d. Wake Turbulence; or
- e. A high radiation level is encountered in flight.

The PIC shall submit a written Report after landing whenever an aircraft, for which he is responsible, suffers one of the above.

### **16.4.4. Local Assessment**

In order that Occurrence Reports can be more readily assessed, it is extremely important that the Operations Manager / Maintenance Manager / Safety And Quality Manager / should give careful consideration to the circumstances of the event before the report is forwarded to the Authority. Their comments and recommendations are a very necessary part of the report and should include opinion as well as any relevant background information which may not be otherwise apparent from the text of the Pilot's or Engineer's report. Failure to do this may result in an erroneous or incomplete assessment of the incident, which in turn can give rise to protracted correspondence before the file on the event can finally be closed.

## **16.5. INJURY, ILLNESS, OR FATALITY OF A PASSENGER OR CREWMEMBER**

Pilots with an injured, sick, or (apparently) dead passenger or crewmember on board should attempt to ascertain the cause of the medical condition that exists before changing flight plans or making radio calls to ATC.

If a medical emergency exists, request landing at an airport nearest a hospital with an emergency treatment room.

Request a change of flight plan and radar or direction-finding (DF) vectors to that airport.



## **17. RULES OF THE AIR**

### **17.1. INTRODUCTION**

This chapter contains a compilation of International Civil Aviation Organization (ICAO) Standards, Recommended Practices and Procedures for international operations. They may be supplemented by additional rules or procedures, or may be overruled by different provisions, applicable on a regional, national and / or local basis as published in OM Part C.

It should be noted that Smart Cakrawala Aviation regulations may in some instances be more stringent than the ICAO Standards, e.g. mandatory application of the instrument flight rules, criteria for the establishment of minimum safe altitudes, etc.

The Rules of the Air, as outlined, are those contained in ICAO Annex 2, Annex 11 and Doc 4444-RAC / 501. The corresponding national regulations are contained in the Air law. Where the Airlaw differs from the ICAO provisions, such differences are listed in the appropriate section of the OM Part C in so far as they are of concern to Smart Cakrawala Aviation flight operations.

## **17.2. TERRITORIAL APPLICATION OF THE RULES OF THE AIR**

The territory of a State is deemed to be the land area and territorial waters adjacent thereto under the sovereign protection of such State. The airspace above such land and water is sovereign airspace. When operating in the sovereign airspace of a State other than the State of Registry, the flight crew shall identify and apply the most restrictive requirements regarding the State of Registry and the State where the operations are being conducted. The State AIP shall be consulted if there is any doubt as to the State requirements.

For the purpose of this chapter, all airspace outside the territory of any State is referred to as international airspace. The rules in force relating to flight and maneuver of aircraft when operating outside the airspace of any sovereign state, i.e. oceanic or high seas, shall be in accordance with ICAO Annex 2, Rules of the Air.” Responsibility for enforcement of these rules rests with the State of Registry of the aircraft or State of the Operator.

Excerpt from ICAO Rules of the Air, Annex 2)

- The Rules of the Air shall apply to aircraft bearing the nationality and registration marks of a Contracting State, wherever they may be, to the extent that they do not conflict with the rules published by the State having jurisdiction over the territory overflown.

**Note:**

The Council of the International Civil Aviation Organization resolved, in adopting Annex 2 in April 1948 and Amendment 1 to the said Annex in November 1951, that the Annex constitutes Rules relating to the flight and maneuver of aircraft within the meaning of Article 12 of the Convention. Over the high seas, therefore, these rules apply without exception.

- If, and so long as, a Contracting State has not notified the International Civil Aviation Organization to the contrary, it shall be deemed, as regards aircraft of its registration, to have agreed as follows:
- For purposes of flight over those parts of the high seas where a Contracting State has accepted, pursuant to a regional air navigation agreement, the responsibility of providing air traffic services, the appropriate ATS authority referred to in this Annex is the relevant authority designated by the State responsible for providing those services.

**Note:**

The phrase regional air navigation agreement refers to an agreement approved by the Council of ICAO normally on the advice of a Regional Air Navigation Meeting.

## 17.3. INTERCEPTION OF CIVIL AIRCRAFT

### 17.3.1. Intercept Procedure

The following procedures and visual signals shall apply over the territory and territorial waters of Republic of Indonesia in the event of interception of an aircraft.

### 17.3.2. Action by Intercepted Aircraft

An aircraft which is intercepted by another aircraft shall immediately:

- Follow the instructions given by the intercepting aircraft, interpreting and responding to the visual signals listed on pages ENR 1.12-3 to 1.12-4.
- Notify, if possible the appropriate air traffic services unit.
- Attempt to establish radio communication with the intercepting aircraft or with the appropriate intercept control unit, by making a general call on the emergency frequency 121.5 MHz, giving the identify of the intercepted aircraft and the nature of flight and if no contact has been established and if practicable, repeating this call on the emergency frequency 243 MHz.
- If equipped with SSR transponder, select mode A, code 7700, unless otherwise instructed by the appropriate ATS unit.

### 17.3.3. Communication during Interception

If radio contact is established during interception but communication in a common language is not possible, attempts shall be made to convey instructions, acknowledgement of instructions and essential information by using the following phrases and transmitting each phrases twice:

The phrases shown in the table below shall be used by the intercepting aircraft and transmitted twice in the circumstances described in the preceding paragraph.

Phrases for use by INTERCEPTING aircraft		
Phrase	Pronunciation 1	Meaning
CALL SIGN	KOL SA-IN	What is your call sign?
FOLLOW	FOL-LO	Follow me
DESCEND	DEE-SEND	Descend for landing
YOU LAND	YOU LAAND	Land at this aerodrome
PROCEED	PRO-SEED	You may proceed

\* In the second column, syllables to be emphasized are underlined.

Phrases for use by INTERCEPTING aircraft		
Phrase	Pronunciation *	Meaning
CALL SIGN	KOL SA-IN	My call sign is (call sign)
(call sign) **	(call sign)	
WILCO	VILL-KO	Understood. Will comply
CAN NOT	KANN NOTT	Unable to comply
REPEAT	REE-PEET	Repeat your instruction
AM LOST	AM LOSST	Position unknown

MAYDAY HIJACK *** LAND (place name) DESCEND	MAYDAY HI-JACK LAAND (place name) DEE-SEND	I am in distress I have been hijacked I request to land at (place name) I require descent
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- \* In the second column, syllables to be emphasized are underlined.
- \*\* The call sign required to be given is that used in radio telephony communications with air traffic services units and corresponding to the aircraft identification in the flight plan.
- \*\*\*Circumstances may not always permit, nor make desirable, the use of the phrase "HIJACK".

If any instruction received by radio from any sources conflict with those given by the intercepting aircraft by visual signals, the intercepted aircraft shall request immediate clarification while continuing to comply with the visual interactions given by the intercepting aircraft.

If any instruction received by radio from any sources conflict with those given by intercepting aircraft by radio, the intercepted aircraft shall request immediate clarification while continuing to comply with the radio instructions given by the intercepting aircraft.

### SIGNALS FOR USE IN THE EVENT OF INTERCEPTION

The visual signals are detailed in the table below.

**Signals initiated by intercepting aircraft and responses by intercepted aircraft**

Series	Intercepting Aircraft Signals	Meaning	Intercepted Aircraft Responses	Meaning
1	<b>DAY OR NIGHT</b> - rocking aircraft and flashing navigational lights at irregular intervals from a position slightly above and ahead of, and normally to the left of, the intercept aircraft and, after acknowledgement, a slow level turn, normally to the left, on the desired heading. <b>Note.</b> 1: Meteorological conditions	You have been intercepted. Follow me	<b>DAY OR NIGHT</b> - rocking aircraft and flashing navigational lights at irregular intervals and following. <b>Note.</b> Additional action required to be taken by intercepted aircraft is prescribed in Annex 2 -Rules of the Air, Chapter 3, para 3.8.	Understood , will comply.

	<p>or terrain may require the intercepting aircraft to reverse the positions and direction or turn given above in series 1.</p> <p><b>Note. 2:</b> If the intercepted aircraft is not able to keep pace with the intercepting aircraft, the latter is expected to fly a series of race-track patterns and to rock the aircraft each time it passes the intercepted aircraft.</p>			
2	<p><b>DAY or NIGHT:</b> An abrupt break-away maneuver from the intercepted aircraft consisting of a climbing turn of 90 degrees or more without crossing the line of flight of the intercepted aircraft.</p>	You may proceed.	<b>DAY OR NIGHT -</b> Rocking the aircraft	Understood , will comply.
3	<p><b>DAY OR NIGHT -</b> Lowering landing gear (if fitted), showing steady landing lights and overflying runway in use or, if the intercepted aircraft is a helicopter, overflying the helicopter landing area.</p>	Land at this aerodrome	<b>DAY OR NIGHT -</b> Lowering landing gear (if fitted), showing steady landing lights and following the intercepted aircraft and if, after overflying the runway in use or the helicopter landing area, landing is considered safe, proceed to land.	Understood , will comply.
4	<p><b>DAY OR NIGHT -</b> Raising landing gear (if fitted) and flashing landing lights while passing over runway in use or helicopter landing area at a height exceeding 1,000 FT but not exceeding 2,000 FT above the aerodrome</p>	Aerodrome you have designated is inadequate	<b>DAY OR NIGHT -</b> If it is desired that the intercepted aircraft follow the intercepting aircraft to an alternate aerodrome, the intercepting aircraft raises its landing gear (if fitted) and uses the series 1	Understood follow me.  Understood

	level, and continued to circle runway in use or helicopter landing area. If unable to flash landing light, flashing any other lights available.		signals described for intercepting aircraft. If it is decided to release the intercepted aircraft, the intercepting aircraft uses the series 2 signals prescribed for intercepting aircraft.	you may proceed
5	<b>DAY or NIGHT:</b> Regular switching on and off of all available lights but in such a manner as to be distinct from flashing lights.	Cannot comply	<b>DAY OR NIGHT</b> – use series 2 signals prescribed for intercepting aircraft.	Understood.
6	<b>DAY OR NIGHT</b> - irregular flashing of all available lights.	In distress		

## **17.4. AIR TRAFFIC CLEARANCE**

An air traffic clearance is an authorization for an aircraft to proceed under specified conditions within controlled airspace's. If for any reason an air traffic clearance is not acceptable to the pilot-in command, he may request an alternative clearance. The pilot-in-command shall obtain an air traffic clearance prior to operating in a controlled airspace.

An air traffic clearance will contain the following items:

- a. Aircraft identification.
- b. Clearance limit and route instruction.
- c. Level assignment.
- d. Departure instruction when necessary.
- e. Approach instruction when necessary.
- f. Clearance expire time when necessary.
- g. Any special instructions and information.

Request for Amended Clearance. If the amended clearance is requested at a time a position report is made the information contained in that report shall be given on the assumption that the aircraft is proceeding in accordance with the current clearance and not with that which is being requested.

The contents of an air traffic control clearance or any revisions there to shall apply only to those portions of the flight conducted within controlled airspaces.

An air traffic control clearance may be issued directly to an aircraft by ATC units or relayed through an air/ground HF RTF by communication units.

The pilot-in-command having acknowledged an air traffic control clearance shall not deviate from the provisions of the clearance unless an amended clearance has been obtained.

The clearance limit is normally the aerodrome of first intended landing, the point of leaving controlled airspace on in the case of flight where prior co-ordination, with an adjacent unit cannot be established, the FIR boundary.

In the event of an aircraft arriving at the clearance limit without having received a further clearance, the pilot-in-command shall immediately request a further clearance and hold in accordance with the specified holding pattern where one is established or otherwise the standard holding pattern, maintaining the last assigned cruising level until further clearance is received.

## **17.5. GROUND SIGNALS**

Ground signals have been internationally agreed upon and many serve as a means of contact between the ground and rescue aircraft when no radio contact is available. As far as possible, the following instructions shall be adhered to:

- Form symbols by any available means.
- Make symbols not less than 3 meters in size.
- Take care to lay out symbols exactly as depicted to avoid confusion with other symbols.
- Provide as much colour contrast as possible between material and the background.
- Make every effort to attract attention by other means such as radio, flares, smoke or reflected light.

### **17.5.1. Air/Ground Signals**

When it is necessary for an aircraft to convey information to survivors or to ground search parties, and two-way radio communication is not available, it shall, if practicable convey the information by dropping a message or by dropping communication equipment that would enable direct contact to be established.

When a ground signal has been displayed and is understood, the aircraft shall acknowledge the signal by the means described above or, if that is not possible, by

rocking the wings of the aircraft.

When a ground signal has been displayed and is not understood, the survivors or ground search party shall be so informed by a direct message except that, if that course is not practicable, failure to rock the wings will indicate that the message is


not understood.

**Ground-air visual signal code used by survivors**



No.	Message	Code Symbol
1.	REQUIRE ASSISTANCE	V
2.	REQUIRE MEDICAL ASSISTANCE	X
3.	NO or NEGATIVE	N
4.	YES or AFFIRMATIVE	Y
5.	PROCEEDING IN THIS DIRECTION	↑

Ground-air visual signal code use by rescue unit.

No.	Message	Code Symbol
1.	OPERATION COMPLETED	LLL
2.	WE HAVE FOUND ALL PERSONNEL	LL —
3.	WE HAVE FOUND ONLY SOME PERSONNEL	++
4.	WE ARE NOT ABLE TO CONTINUE. RETURNING TO BASE	XX
5.	HAVE DEVIDED INTO TWO GROUPS. EACH PROCEEDING IN DIRECTION INDICATED	
6.	INFORMATION RECEIVED THAT AIRCRAFT IS IN THIS DIRECTION	→ →
7.	NOTHING FOUND, WILL CONTINUE TO SEARCH	NN

## **17.6. DISTRESS AND URGENCY SIGNALS**

### **17.6.1. Distress**

The following signals, used either together or separately, mean that grave and imminent danger threatens, and immediate assistance is requested:

- a. A signal made by radiotelegraphy or by any other signaling method consisting of the group SOS (... \_ \_ \_ ... in the Morse Code).
- b. A signal sent by radiotelephony consisting of the spoken word MAYDAY.
- c. Rockets or shells throwing red lights, fired one at a time at short intervals.
- d. A parachute flare showing a red light.

**Note:**

*Article 41 of the ITU Radio Regulations (Nos. 3268, 3270 and 3271 refer) provide information on the alarm signals for actuating radio telegraph and radiotelephone auto-alarm systems:*

*3268 - The radiotelegraph alarm signal consists of a series of twelve dashes sent in one minute, the duration of each dash being four seconds and the duration of the interval between consecutive dashes one second. It may be transmitted by hand but its transmission by means of an automatic instrument is recommended.*

*3270 - The radiotelephone alarm signal consists of two substantially sinusoidal audio frequency tones transmitted alternately. One tone shall have a frequency of 2200 Hz and the other a frequency of 1300 Hz, the duration of each tone being 250 milliseconds.*

*3271 - The radiotelephone alarm signal, when generated by automatic means, shall be sent continuously for a period of at least thirty seconds but not exceeding one minute, When generated by other means, the signal shall be sent as continuously as practicable over a period of approximately one-minute.*

### **17.6.2. Urgency Signals**

The following signals, used either together or separately, mean that an aircraft wishes to give notice of difficulties which compel it to land without requiring immediate assistance:

- a. The repeated switching on and off of the landing lights, or
- b. The repeated switching on and off of the navigation lights in such manner as to be distinct from flashing navigation lights.

The following signals, used either together or separately, mean that an aircraft has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or of some person on board or within sight:

- a. A signal made by radiotelegraphy or by any other signalling method consisting of the group XXX,
- b. A signal sent by radio telephony consisting of the spoken words PAN PAN.


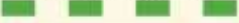




**WARNING SIGNALS FOR UNAUTHORIZED FLYING IN OR TO ENTER A RESTRICTED, PROHIBITED OR DANGER AREA**

By day and by night, a series of projectiles discharged from the ground at intervals of 10 seconds, each showing, on bursting, red and green lights or stars will indicate to an unauthorized aircraft that it is flying in or about to enter a restricted, prohibited or danger area and that the aircraft is to take such remedial action as may be necessary.

### SIGNALS FOR AERODROME TRAFFIC

#### Light And Pyrotechnic Signals


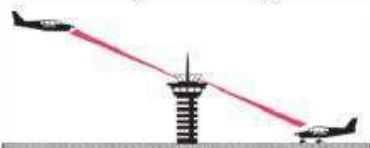


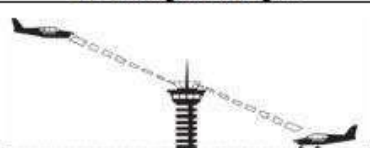
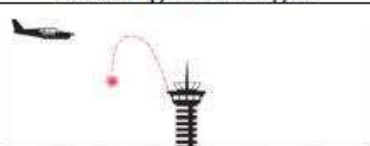
Instruction: Light signals are directed from Aerodrome Control to aircraft concerned. (See Figure below)

Color and Type of Signal	Movement of Vehicles, Equipment and Personnel	Aircraft on the Ground	Aircraft in Flight
<b>Steady green</b> 	Cleared to cross, proceed or go	Cleared for takeoff	Cleared to land
<b>Flashing green</b> 	Not applicable	Cleared for taxi	Return for landing (to be followed by steady green at the proper time)
<b>Steady red</b> 	Stop	Stop	Give way to other aircraft and continue circling
<b>Flashing red</b> 	Clear the taxiway/runway	Taxi clear of the runway in use	Airport unsafe, do not land
<b>Flashing white</b> 	Return to starting point on airport	Return to starting point on airport	Not applicable
<b>Alternating red and green</b> 	Exercise extreme caution!!!!	Exercise extreme caution!!!!	Exercise extreme caution!!!!

**NOTE : CLEARANCE TO LAND AND TAXI WILL BE GIVEN IN DUE COURSE !**

Acknowledgement by an Aircraft:

1. When in flight:
  - a. During the hours of daylight:
    - By rocking the aircraft wings;
  - Note:**  
This signal should be expected on the base and final legs of the approach.
  - b. During the hours of the darkness:
    - By flashing on and off twice the aircraft's landing lights or, if not so equipped, by switching on and off twice its navigation lights.
2. When on the ground:
  - a. During the hours of daylight:
    - By moving the aircraft ailerons or rudder;
  - b. During the hours of the darkness:
    - By flashing on and off twice the aircraft's landing lights or, if not so equipped, by switching on and off twice its navigation lights.

Aircraft in the air	<= From tower to =>	Aircraft on the ground
Cleared to Land	 <p>Steady Green Light</p>	Cleared for Takeoff
Give way to other aircraft and continue circling	 <p>Steady Red Light</p>	Stop
Return for landing (and wait for further clearance)	 <p>Flashing Green Light</p>	Cleared to Taxi
Do not land, Aerodrome unsafe	 <p>Flashing Red Light</p>	Taxi clear of the landing area
Land at this aerodrome and taxi to apron (wait for landing clearance)	 <p>Flashing White Light</p>	Return to starting point
Notwithstanding any previous instruction, do not land for the time being	 <p>Red Flare</p>	(not used)

## **18. SAFETY MANAGEMENT SYSTEM (SMS)**

### **18.1. SCOPE AND APPLICABILITY**

A Safety Management System is a businesslike approach to safety. It is a systematic, explicit and comprehensive process for managing safety risks. As with all management systems, a Safety Management System provides for goal setting, planning, and measuring performance. A Safety Management System is woven into the fabric of our organization.

**It becomes part of our culture, the way we do our jobs.**

The intent of any Safety Management System is to produce a culture of safety awareness – a proactive approach for identifying, managing and controlling risks.

The result is a team working cooperatively and proactively to seek and detect hazards and risks, to adequately put in place adequate counter measures to assure safety.

- This manual constitutes requirements for safety management development.
- This manual is intended to provide PT. Smart Cakrawala Aviation SMS development guidance
- This manual is intended to comply with the authority requirement on SMS.
- This manual consists essentially of an outline of the SMS program of PT. Smart Cakrawala Aviation.
- The management of PT. Smart Cakrawala Aviation holds in high regard the health and safety, working conditions of its employees and customers.
- This manual is developed with reference to SMS guidance published by internal bodies.
- The frame work of PT. Smart Cakrawala Aviation's SMS development is based on these entities, strategy, system, implementation, people, and methodology.
- This manual establishes the minimum acceptable requirements for Smart Cakrawala Aviation with regard to the SMS development.

### **18.2. COMPLIANCE WITH THE REGULATIONS**

This manual forms a part of PT. Smart Cakrawala Aviation's manual suite and complies with the provisions of the "Appropriate Regulatory Requirement" for a Safety Management System. And a Safety Management System relies on all staff to accept a responsible and authoritative role for safety.

A SMS relies on the development of a reporting culture by all employees. A just reporting system forms the frame work around which the SMS is built. It is a vehicle for ensuring that hazards and safety deficiencies are brought to the attention of those who have the authority to make changes.

The SMS holds management accountable for safety-related action or in action. PT. Smart Cakrawala Aviation SMS approach ensures that authority and accountability co-exist.



# OPERATION MANUAL

**PART A  
GENERAL**

---

**FOR DETAIL OF THE SAFETY MANAGEMENT SYSTEM SEE SAFETY MANAGEMENT  
SYSTEM MANUAL  
AS SUB MANUAL THIS PART**




## OPERATIONS FORMS

DESCRIPTION	FORM NUMBER	PAGE	REMARKS
FLIGHT RELEASE FORM	SCA-OPS-001	Appendix A-2	REV-01
OPERATIONAL FLIGHT PLAN	SCA-OPS-002	Appendix A-3	REV-01
PAX MANIFEST	SCA-OPS-003	Appendix A-4	REV-00
CARGO MANIFEST	SCA-OPS-004	Appendix A-5	REV-00
OPERATIONS DAILY RECORD	SCA-OPS-005	Appendix A-6	REV-00
DAILY DUTY TIME RECORD	SCA-OPS-006	Appendix A-7	REV-00
ALCOHOL N BLOOD TEST FORM SCA	SCA-OPS-007	Appendix A-8	REV-00
LOAD SHEET CARGO VERSION	SCA-OPS-008	Appendix A-9	REV-01
LOAD SHEET PASSANGER VERSION	SCA-OPS-009	Appendix A-11	REV-01
MANUAL REVISION REQUEST FORM	SCA-OPS-010	Appendix A-13	REV-00
GENERAL DECLARATION	SCA-OPS-011	Appendix A-14	REV-00
SURAT PERNYATAAN PEMBEBASAN	SCA-OPS-012	Appendix A-15	REV-00
TRIP REPORT	SCA-OPS-013	Appendix A-16	REV-00
WEIGHT AND BALANCE ROBINSON R66	SCA-OPS-014	Appendix A-17	REV-00
FUEL REQUEST	SCA-OPS-015	Appendix A-18	REV-00
STOWING CHECKLIST	SCA-OPS-016	Appendix A-19	REV-00
LOAD SHEET AERIAL SURVEY VERSION	SCA-OPS-017	Appendix A-20	REV-01
PILOT HOURS RECORDS	SCA-OPS-018	Appendix A-22	REV-00
INSPECTION FOR VFR HELIPORT	SCA-OPS-019	Appendix A-23	REV-00
WEIGHT & BALANCE EC-130	SCA-OPS-020	Appendix A-24	REV-00
LOAD SHEET PC-6 PASSANGER VERSION	SCA-OPS-021	Appendix A-25	REV-00
LOAD SHEET PC-6 CARGO VERSION	SCA-OPS-022	Appendix A-27	REV-00
LOAD SHEET PC-6 AERIAL SURVAY	SCA-OPS-023	Appendix A-29	REV-00
PASSENGER SAEFTY BRIEFING EC 130 T2	SCA-OPS-024	Appendix A-31	REV-00
PASSENGER SAEFTY BRIEFING C208B	SCA-OPS-025	Appendix A-32	REV-00
PASSENGER SAEFTY BRIEFING R66	SCA-OPS-026	Appendix A-33	REV-00
PASSENGER SAEFTY BRIEFING PC-6	SCA-OPS-027	Appendix A-34	REV-00
PASSENGER SAEFTY BRIEFING C208	SCA-OPS-028	Appendix A-36	REV-00
OPERATIONAL FLIGHT PLAN PC-6	SCA-OPS-029	Appendix A-37	REV-00
NORMAL PROCEDURE CHECKLIST PC-6/B2-H4	SCA-OPS-030	Appendix A-38	REV-00
EMERGENCY/ABNORMAL PROCEDURE CHECKLIST PC-6/B2-H4	SCA-OPS-031	Appendix A-40	REV-00
OPERATIONAL FLIGHT PLAN EC 130 T2	SCA-OPS-032	Appendix A-43	REV-00



## 1. DISPATCH RELEASE FORM



**OPERATION DEPARTMENT  
FLIGHT RELEASE FORM**

**A. FLIGHT DATA**

Aircraft Type	.....	Date	.....
Aircraft Reg	.....	Route	.....
Pilot in command	.....	1	.....
First officer	.....	2	.....
EOB	.....	3	.....
		4	.....
		5	.....
		Departure time	.....
		Flight rules	IFR/VFR

**Alternate:**

1	.....
2	.....
3	.....
4	.....
5	.....

**Other information :**

<p><b>B. FLIGHT DOCUMENT</b></p> <table border="0"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr><td>COMPANY FLIGHT PLAN</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>ATC FLIGHT PLAN</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>NOTAM</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>METEO REPORT</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>GENDEC</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>NOTOC</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>LICENSE</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>SC</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>MANIFEST</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>LOAD SHEET</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>FLIGHT/LANDING APPROVAL</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>OVER FLYING PERMIT</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>DG ACCEPTANCE CHECKLIST</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>BLOCK FUEL 1</td><td>.....</td><td></td></tr> <tr><td>2</td><td>.....</td><td></td></tr> <tr><td>3</td><td>.....</td><td></td></tr> <tr><td>4</td><td>.....</td><td></td></tr> <tr><td>5</td><td>.....</td><td></td></tr> </tbody> </table>		YES	NO	COMPANY FLIGHT PLAN	<input type="checkbox"/>	<input type="checkbox"/>	ATC FLIGHT PLAN	<input type="checkbox"/>	<input type="checkbox"/>	NOTAM	<input type="checkbox"/>	<input type="checkbox"/>	METEO REPORT	<input type="checkbox"/>	<input type="checkbox"/>	GENDEC	<input type="checkbox"/>	<input type="checkbox"/>	NOTOC	<input type="checkbox"/>	<input type="checkbox"/>	LICENSE	<input type="checkbox"/>	<input type="checkbox"/>	SC	<input type="checkbox"/>	<input type="checkbox"/>	MANIFEST	<input type="checkbox"/>	<input type="checkbox"/>	LOAD SHEET	<input type="checkbox"/>	<input type="checkbox"/>	FLIGHT/LANDING APPROVAL	<input type="checkbox"/>	<input type="checkbox"/>	OVER FLYING PERMIT	<input type="checkbox"/>	<input type="checkbox"/>	DG ACCEPTANCE CHECKLIST	<input type="checkbox"/>	<input type="checkbox"/>	BLOCK FUEL 1	.....		2	.....		3	.....		4	.....		5	.....		<p><b>C. 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**PILOT IN COMMAND :**

I .....  
LICENCE NO: .....

SCA-OPS-001 REV - 01



## 3. PAX MANIFEST FORM



### PAX MANIFEST

NO.....

A/C TYPE		PIC	
A/C REG	PK-	SIC	
DATE		REMARK	
POINT OF EMBARKATION			
POINT OF DISEMBARKATION			
ROUTE			

**PASSANGERS INFORMATION**

NO	NAME	FOR OFFICIAL US ONLY	PAX. WEIGHT (KG)	BAGGAE CHEKED		REMARKS
				NO	KGS	
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
TOTAL WEIGHT (Kg)						

PREPARED BY:  
  
 \_\_\_\_\_

APPROVED BY:  
  
 \_\_\_\_\_  
 PIC:

RECEIVED BY:  
  
 \_\_\_\_\_

FORM NO
: SCA-OPS-003

REV
: 00

## 4. CARGO MANIFEST FORM


A/C TYPE		PIC	
A/C REG		SIC	
DATE		REMARK	
POINT OF EMBARKATION			
POINT OF DISEMBARKATION			
ROUTE			
CARGO INFORMATION			
NO	NATURE OF GOODS	NO OF PACKAGE	GROSS WEIGHT
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
TOTAL WEIGHT (Kg)			
PREPARED BY:		APPROVED BY:	
RECEIVED BY:		PIC:	

FORM NO : SCA-OPS-004  
REV : 00

## 5. OPERATIONS DAILY RECORD FORM

[illegible]

## 6. DAILY DUTY TIME RECORD FORM



### DAILY DUTY TIME RECORD

DATE : \_\_\_\_\_

ROUTE : \_\_\_\_\_

NO.	NAME	AC/ REG.	SCHED.TIME DEPT.	TIME IN	SIGN	DATE / SCHED.TIME ARRVL	TIME OUT	SIGN	REMARKS
1									
2									
3									
4									
5									
6									
7									
8									


SCA-OPS-006

REV-00





### 8. LOAD SHEET CARGO VERSION

Weight & Balance Form PT. SMART CAKRAWALA AVIATION			
Aircraft Type / Serial No.:		CESSNA 208B Ex	
Registration Number:		PK- SNP	Configuration
Date / Time:			Flight Number
ADEP / ADES			FROM - TO
<b>Instructions:</b> 1) Check the correct TAB for aircraft and configuration. (Passenger, Cargo or Aerial Survey). 2) Enter all passenger and load data into columns. <b>Note: Weight in pound</b> 3) Enter the amount of Fuel and pilot in <b>pound</b> On-Board in column below 4) Check load position on chart page 2 5) Enter the Fuel Use En-Route in column below. 6) Check landing weight and moment. 7) Check load position on chart page 2.			
Fuel On Board			Pounds
Fuel Use En-Route			Pounds
Load Calculation	Weight	Arm	Moment
Aircraft Empty Weight	5163.1	193.38	998.4
Usable fuel (max 2.224 lbs)		203.80	0.0
Pilots		135.50	0.0
Passengers	Passengers Row 1 (1 - 3)	173.90	0.0
	Passengers Row 2 (4 - 6)	209.90	0.0
	Passengers Row 3 (7 - 9)	245.90	0.0
	Passengers Back Bench	344.00	0.0
Cargo Pod A (230 lbs. max)		132.40	0.0
Cargo Pod B (310 lbs. max)		182.10	0.0
Cargo Pod C (270 lbs. max)		233.40	0.0
Cargo Pod D (280 lbs. max)		287.60	0.0
Cargo	Zone 1 (1410 lbs. max)	172.1	0.0
	Zone 2 (1430 lbs. max)	217.8	0.0
	Zone 3 (1410 lbs. max)	264.4	0.0
	Zone 4 (1380 lbs. max)	294.5	0.0
	Zone 5 (1270 lbs. max)	319.5	0.0
	Zone 6 (325 lbs. max)	334	0.0
Ramp Weight	5163.1		998.4
Fuel burn for taxi, startup	-35	203.80	-7.1
Takeoff Weight	5128.11	193.3	991.3
Fuel Use Enroute	0	203.8	0.0
Landing Weight	5128.11	193.3	991.3
Remaining Useful Load	3,679 Lbs		
<b>NOTE:</b> Ramp Weight <b>8842 Lbs</b> Takeoff Weight <b>8807Lbs</b> Landing Weight <b>8500 Lbs</b> Single Seat assy 25,1Lbs/11,34kg    double seat assy 46.30Lbs/21kg			
Prepared By:..... Approved By:.....			





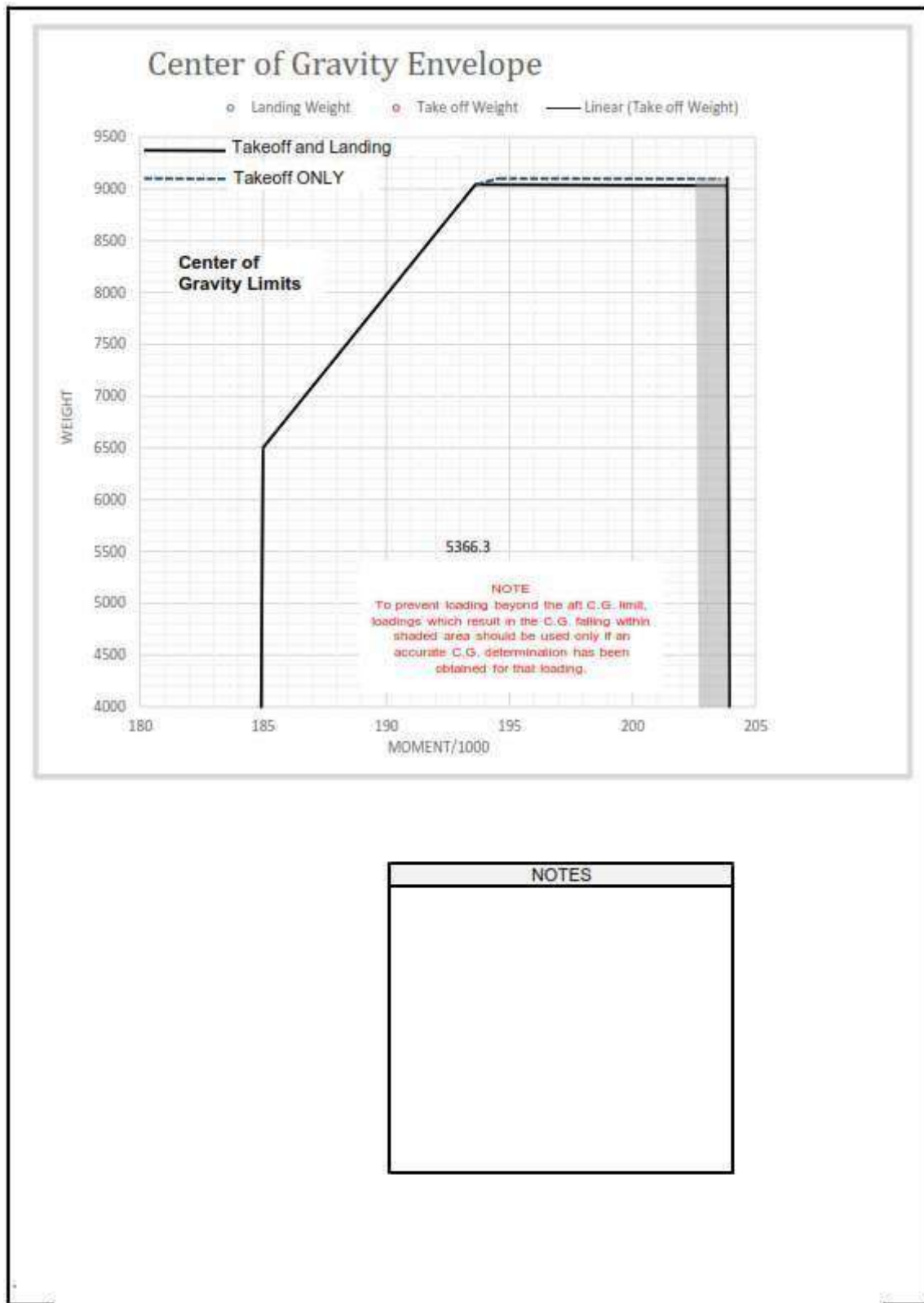


# OPERATION MANUAL

## PART A APPENDIX A

### 9. LOAD SHEET PASSANGER VERSION

Weight & Balance Form PT. SMART CAKRAWALA AVIATION			
Aircraft Type / Serial No.:		CESSNA 208B Ex	
Registration Number:		PK- SNP	Configuration
Date / Time:			Flight Number
ADEP / ADES			FROM - TO
<b>Instructions:</b> <ol style="list-style-type: none"> <li>1) Check the correct TAIL for aircraft and configuration. (Passenger, Cargo or Aerial Survey).</li> <li>2) Enter all passenger and load data into columns. <u>Note: Weight in pound</u></li> <li>3) Enter the amount of Fuel and pilot in <u>pound</u> On-Board in column below</li> <li>4) Check load position on chart page 2</li> <li>5) Enter the Fuel Use En-Route in column below.</li> <li>6) Check landing weight and moment.</li> <li>7) Check load position on chart page 2</li> </ol>			
		Fuel On Board	Pounds
		Fuel Use En-Route	Pounds
Load Calculation		Weight	Arm
			Moment
Aircraft Empty Weight		5401.3	193.38
Usable fuel (max 2.224 lbs)			203.80
Pilots			135.50
Passengers	Passengers Row 1 (1 - 3)		173.90
	Passengers Row 2 (4 - 6)		209.90
	Passengers Row 3 (7 - 9)		245.90
	Passengers Back Bench		344.00
Cargo Pod A (230 lbs. max)			132.40
Cargo Pod B (310 lbs. max)			182.10
Cargo Pod C (270 lbs. max)			233.40
Cargo Pod D (280 lbs. max)			287.60
Cargo	Zone 1 (1410 lbs. max)		172.1
	Zone 2 (1430 lbs. max)		217.8
	Zone 3 (1410 lbs. max)		264.4
	Zone 4 (1380 lbs. max)		294.5
	Zone 5 (1270 lbs. max)		319.5
	Zone 6 (325 lbs. max)		334
Ramp Weight		5401.3	1044.5
Fuel burn for taxi, startup		-35	-7.1
Takeoff Weight		5366.3	1037.4
Fuel Use Enroute		0	0.0
Landing Weight		5366.3	1037.4
Remaining Useful Load		3,441	Lbs
<b>NOTE:</b> Ramp Weight 8842 Lbs      Takeoff Weight 8807Lbs      Landing Weight 8500 Lbs Single Seat assy 25,1Lbs/11,34kg      double seat assy 46.30Lbs/21kg			
Prepared By:..... Approved By:.....			







# OPERATION MANUAL

## PART A APPENDIX A

### 10. MANUAL REVISION REQUEST FORM

		MANUAL REVISION REQUEST FORM		REQ NO. (Library Use Only)	
ORIGINATOR USE					
MANUAL TITLE:					
SECTION / PAGE NO. / PARA / REV:					
REQUESTED CHANGE:					
ORIGINATOR (PRINT and SIGN):				DATE:	
DEPARTMENT:			POSITION:		
<i>Send Revision Request Form to Document Control Officer for registering and distribution.</i>					
MANUAL APPROVAL AUTHORITY USE					
APPROVAL AUTHORITY NAME:				DATE REC'D:	
DEPARTMENTS CONSULTED REGARDING THE CHANGE					
Who					
Signature / Date					
Who					
Signature / Date					
DEPARTMENT COMMENTS UPON REVIEW					
DECLINED—Reason Provided					
OVED—Details of Approved Revision					
Sample amended page attached					
APPROVAL AUTHORITY SIGNATURE:				DATE:	
INCORPORATED IN REVISION NO.:				DATE:	
Send completed signed Revision Request Form to Document Control Officer for filing.				Form SCA-OPS-010 Rev 0	

## 11. GENERAL DECLARATION



### GENERAL DECLARATION

**\*OUTWARD / INWARD**

Operator : \_\_\_\_\_ Flight Number : \_\_\_\_\_

Marks of Nationality and Registration : \_\_\_\_\_ Date : \_\_\_\_\_

Aircraft Type : \_\_\_\_\_ MTOW (kg) : / \_\_\_\_\_

Departure From : \_\_\_\_\_ Arrival At : \_\_\_\_\_  
(Place – ICAO / IATA Code) (Place – ICAO / IATA Code)

---

#### Flight Routing

("Place" column always to list origin, every en-route stop and destination)

Place	Total number of Crew	Number of Passengers on this Stage
		<b>Departure Place</b>
		Embarking : _____
		Through on the same Flight : _____
		<b>Arrival Place</b>
		Disembarking : _____
		Through on the same Flight : _____

---

#### Declaration of Health

Persons on board with illnesses other than airsickness or the effects of accidents (including persons with symptoms or signs of illness such as rash, fever, chills, diarrhea) as well as those cases of illness disembarked during the flight.

Any other conditions on board which may lead to the spread of disease

Details of each disinfecting or sanitary treatment (place, date, time, method) during the flight. If no disinfecting has been carried out during the flight give details of most recent disinfecting.

Signed, if required \_\_\_\_\_  
Crew member concerned

I declare that all statements and particulars contained in this General Declaration, and in any supplementary forms required to be presented with this General Declaration are complete, exact and true to the best of my knowledge and that all through passengers \*will continue/have continued on this flight.

\* Delete as necessary

#### For Official Use

Signature \_\_\_\_\_


Authorized agent or Pilot-in-command \_\_\_\_\_

Form : SCA-OPS-010

REV : 00



## 12. SURAT PERNYATAAN PEMBEBASAN



**SURAT PERNYATAAN PEMBEBASAN**

Yang bertanda tangan di bawah ini,

NAMA : .....

TEMPAT TANGGAL LAHIR : .....

ALAMAT : .....

NO KTP/PASPORT : .....

Menyatakan serta menyetujui bahwa:

1. Bersedia diangkut dengan oleh PT Samart Cakrawala Aviation dengan segala resiko atau akibat buruk bagi kesehatan saya, yang mungkin terjadi dalam pengangkutan ini.
2. Pengangkutan ini dilakukan tanpa pertimbangan kondisi kesehatan saya, dan segala akibat buruk dari pengangkutan ini bagi kesehatan saya, termasuk namun tidak terbatas pada luka-luka bertambah beratnya penyakit yang diderita dan kematian adalah diluar tanggung jawab PT Smart Cakrawala Aviation, kecuali apabila akibat buruk dari pengangkutan ini bagi kesehatan saya dapat dibuktikan disebabkan oleh tindakan dan kesalahan PT Smart Cakrawala Aviation.
3. Dengan keadaan sebagaimana disebutkan diatas saya dengan ini melepaskan, menjamin, dan membebaskan pihak PT Smart Cakrawala Aviation ataupun pihak lain yang bekerja untuk PT Smart Cakrawala Aviation dari dan setiap dan segala tuntutan dalam bentuk apapun yang mungkin diajukan mereka (termasuk biaya dan pengeluaran), baik yang timbul saat ini ataupun dimasa yang akan datang.
4. Bertanggung jawab penuh atas segala akibat yang terjadi pada kesehatan yang tersebut diatas.

Demikian pernyataan ini saya buat dengan penuh kesadaran dan tanggung jawab.


Yang Membuat Pernyataan...../20.....

.....

SCA-OPS-012

REV.00

## 13. TRIP REPORT



**OPERATIONS DEPARTMENT**

**TRIP REPORT**

To : Operation Manager  
CC : .....

**DETAIL OF FLIGHT:**

Date	: .....	Type of A/C	: .....
Time	: .....	A/C Reg	: .....
PIC	: .....	Flight No	: .....
Location	: .....	Route	: .....

**THIS REPORT COVERS:**

- ☐ Passenger service deviation
- ☐ Ground handling & servicing deviation
- ☐ Delayed departure / arrival
- ☐ Repair/ component replacement while pax are on board
- ☐ Diversion/ go-around/ re-routing
- ☐ Landing during reported weather below minima
- ☐ Mis-conduct of flight (hard landing, near miss, non-compliance to ATC)
- ☐ Component/ system failure in flight
- ☐ Abnormal operation (flapless ldg, alt L/G, eng shutdown in flt, blown tyre etc)
- ☐ Emergency (single eng ldg, rejected T/O, over-run ldg etc)
- ☐ Others

**BRIEF DESCRIPTION :**

.....

.....

.....

.....

.....


**PILOT IN COMMAND :**

(.....)

LICENCE NO : .....

SCA-OPS-013 REV - 00

### 14. LOAD SHEET R66

		A/C REG:		Origin:	
		Date:		Destination:	
Line	Item	Weight (Kg)	Location		Moment
			Long Arm (in.)	Lat Arm (in.) + = Right - = Left	Long (in-lb) Lat (in-lb)
1	Basic empty Weight	1438.2	108.3		155792.0 -1141.0
2	Forward Right Door	ON	49.5	26.8	158.3 91.1
3	Forward Left Door	ON	49.5	-26.8	158.3 -91.1
4	Aft Right Door	ON	75.2	27.2	238.8 86.4
5	Aft Left Door	ON	75.2	-27.2	238.8 -86.4
6	Removable Cyclic	IN	35.3	-8.0	0.0 0.0
7	Removable Collective	IN	46.5	-21.0	0.0 0.0
8	Removable Pedals	IN	16.3	-9.5	0.0 0.0
9	Pilot (Forward Right Seat)	0	49	12.2	#N/A #N/A
10	Left Forward Passenger	0	49	-12.2	6481.6 -1613.8
11	Aft Right Passenger	0	80	16.0	10582.2 2116.4
12	Aft Center Passenger	0	78	0.0	0.0 0.0
13	Aft Left Passenger	0	80	-16.0	10582.2 -2116.4
14	Baggage under Forward Right Seat		42	12.2	0.0 0.0
15	Baggage under Forward Left Seat	0	42	-12.2	0.0 0.0
16	Baggage under Aft Left Seat	0	82	15.0	0.0 0.0
17	Baggage under Aft Right Seat	0	82	-15.0	0.0 0.0
18	Baggage in Main Baggage Comp.	0	107	0.0	0.0 0.0
19	Zero Usable Fuel Weight & CG	#N/A	#N/A	#N/A	#N/A #N/A
20	Usable Fuel Quantity (lit)	0	102.5	-3	26906.7 -787.5
21	Take Off Gross Weight & CG	#N/A	#N/A	#N/A	#N/A #N/A


Prepared by:

Captain:

SCA-CPS-014



## 15. FUEL REQUEST

 <b>Smart Cakrawala Aviation</b>		
FUEL REQUEST		
REG		
Date		
Route		
Total Fuel on Board	L/H	R/H
<i>Received by</i> .....		<i>Request By PIC</i> .....
SCA-OPS-015		REV-00



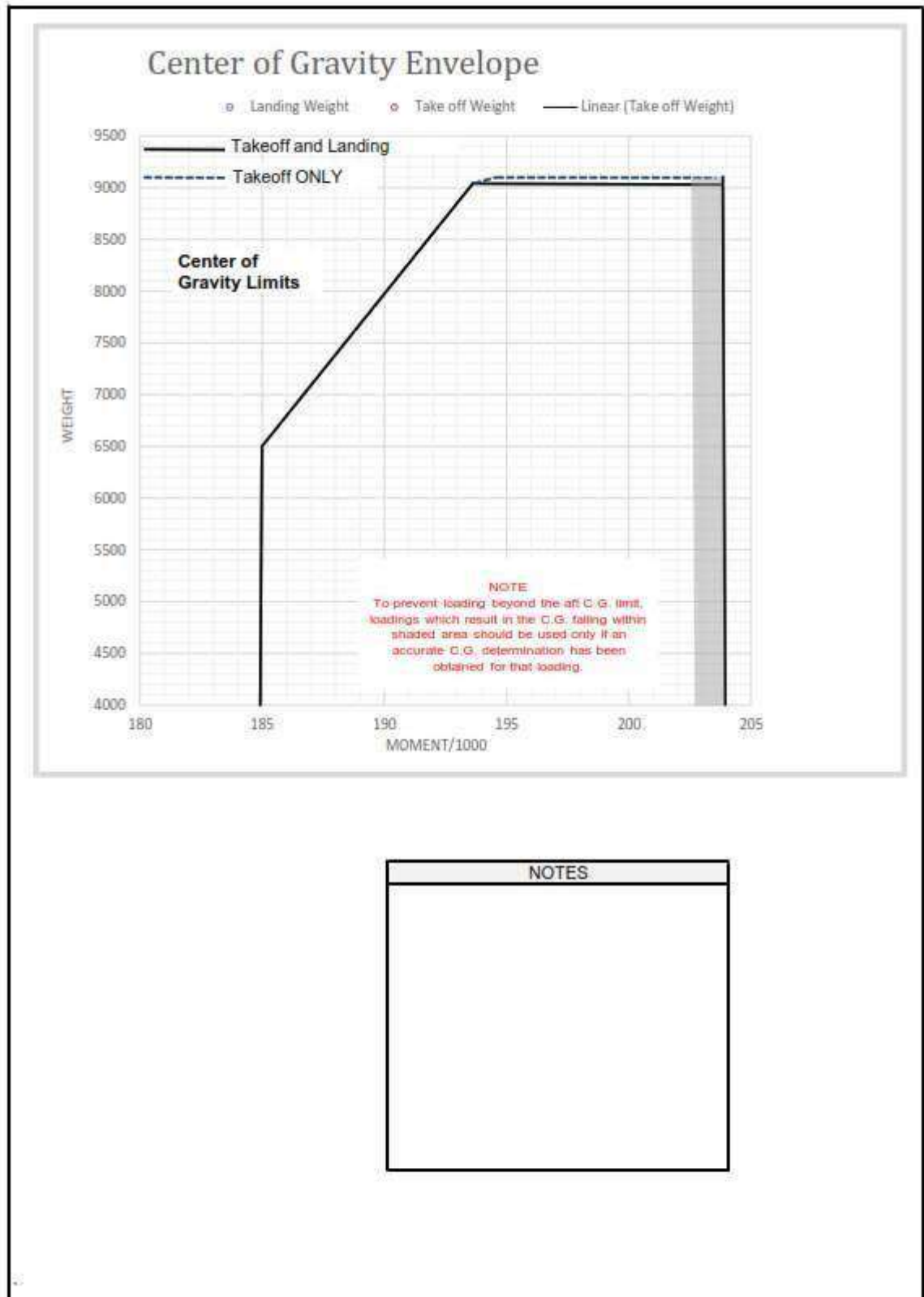


# OPERATION MANUAL


## PART A APPENDIX A

### 17. LOAD SHEET 208B AERIAL SURVEY

<b>Weight &amp; Balance Form</b> PT. SMART CAKRAWALA AVIATION			
Aircraft Type / Serial No.:		CESSNA 208B Ex	
Registration Number:		PK- SNP	Configuration
Date / Time:			Flight Number
ADEP / ADES			FROM - TO
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <b>Instructions:</b>            1) Check the correct TAB for aircraft and configuration. (Passenger, Cargo or Aerial Survey).            2) Enter all passenger and load data into columns. <b>Note: Weight in pound</b>            3) Enter the amount of Fuel and pilot in <b>pound</b> On-Board in column below            4) Check load position on chart page 2            5) Enter the Fuel Use En-Route in column below.            6) Check landing weight and moment.            7) Check load position on chart page 2         </div> <div style="width: 35%; text-align: right;"> </div> </div>			
Fuel On Board			Pounds
Fuel Use En-Route			Pounds
Load Calculation		Weight	Arm
		Moment	
Aircraft Empty Weight		5040.9	193.38
Usable fuel (max 2.224 lbs)			203.80
Pilots			135.50
<b>Passengers</b>	Passengers Row 1 (1 - 3)		173.90
	Passengers Row 2 (4 - 6)		209.90
	Passengers Row 3 (7 - 9)		245.90
	Passengers Back Bench		344.00
Cargo Pod A (230 lbs. max)			132.40
Cargo Pod B (310 lbs. max)			182.10
Cargo Pod C (270 lbs. max)			233.40
Cargo Pod D (280 lbs. max)			287.60
<b>Cargo</b>	Zone 1 (1410 lbs. max)		172.1
	Zone 2 (1430 lbs. max)		217.8
	Zone 3 (1410 lbs. max)		264.4
	Zone 4 (1380 lbs. max)		294.5
	Zone 5 (1270 lbs. max)		319.5
	Zone 6 (325 lbs. max)		334
<b>Ramp Weight</b>		5040.9	974.8
Fuel burn for taxi, startup		-35	203.80
<b>Takeoff Weight</b>		5005.85	193.3
Fuel Use Enroute		0	203.8
<b>Landing Weight</b>		5005.85	193.3
<b>Remaining Useful Load</b>		3,801	Lbs
<b>NOTE:</b> Ramp Weight 8842 Lbs      Takeoff Weight 8807Lbs      Landing Weight 8500 Lbs Single Seat assy 25,1Lbs/11,34kg    double seat assy 46.30Lbs/21kg			
Prepared By:..... Approved By:.....			



## 18. PILOT HOURS RECORDS



### PILOT HOURS RECORD

NAME : \_\_\_\_\_

LIC NO : \_\_\_\_\_

MONTH : \_\_\_\_\_


NO	Date Of Flight	A/C REG	FLIGHT LOG (HRS)		ROUTE	REMARKS
			FLIGHT	BLOCK		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
TOTAL						

Grand Total : \_\_\_\_\_

Pilot Signature \_\_\_\_\_

SCA-OPS-018 ( )

### 19. INSPECTION FOR VFR HELIPORT



#### INSPECTION FOR VFR HELIPORT

Today :      Date :      Month :      Year :

Helipoint inspection has been conducted for :  
From the examination results obtained the following results :

CONTENTS	DESCRIPTIONS	EXPLANATIONS	COMPLIANCE	
			YES	NO
Approval	Registration			
Location	Coordinates Elevation			
Utilization	Purpose Frequency of use			
General	Technical must be have :			
	a. TLOF ( measurement and marking )			
	b. FATO ( measurement and marking )			
	c. Drainage system			
	d. Tie down			
	e. Safety net			
	f. It has 2 access points			
	Operation must be have :			
	a. The visual approach area is determined			
	b. Signs and / or Helipoint marks as follow			
	c. Windsock			
	d. The flight personnel overseeing and responsible			
	e. Equipped with rescue equipment			
	f. Fire Fighting equipment in accordance with its category			
	Facilities :			
	a. Operation			
	b. Emergency response			
	c. Refueling procedure			
	d. Obstacle control (Inclinometer)			
	e. Wharfare monitoring			
f. Maintenance of surface & marking				
g. Maintenance of facilities				
h. Reporting				
Helipoint	Type of Helipoint			
	Touchdown and Lift-off Area (TLOF) :			
	a. Dimensions			
	b. Surface			
	c. The heaviest helicopter to operate from the helipad			
	d. Level surface slope			
	e. No loose things or loose articles			
	f. Diameter of touch down zone			
	Final Approach and Take-off Area (FATO) :			
	a. Dimensions			
Helipoint	b. Level surface slope			
	c. No loose particles/articles or projections			
	d. Drainage facility			
	e. No dry grass/any combustible material which can catch fire			
	Safety Area			
	a. Surface level helipoint required			
	moor Tanyway to TLOF			
	a. Width			
	Markings			
	a. Helicopter Identification Marking			
	Activation Aids			
	a. win sock			
	Fire Fighting Arrangements			
	a. Facilities			
	b. Location/availability of equipment			
	Communication Aids			
	a. Call sign / Frequency			
	Availability of SOPs			
a. Take-off and landing procedures				
b. Ground and manoeuvring procedure				
Emergency Response Plan (ERP) :				
a. Availability of ERP plan				
b. ERP flow chart				
c. Display of ERP plan				
d. Telephone directory				
e. SAR plan				
f. Coordination with other operators or helipoints				

Thus the report of this helipoint inspection is made with the real and to be used properly.  
Who carries out inspection :

1. \_\_\_\_\_


2. \_\_\_\_\_

3. \_\_\_\_\_

SCA-OPS-019



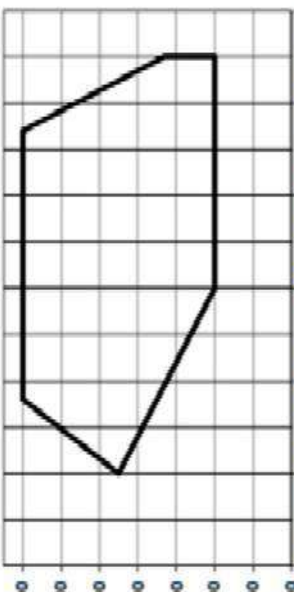
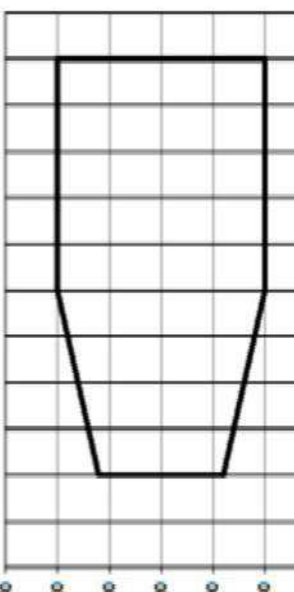
### 20. WEIGHT AND BALANCE EC130T2

		A/C REG:	PK - SNK	ORIGIN:	CUSTOMER:
		DATE :		DESTINATION:	CONFIG SEAT:
					3 Seats

LINE	ITEM	WEIGHT (KG)	LOCATION		MOMENT	
			LONG. ARM	LAT. ARM	LONG	LAT
1	BASIC EMPTY WEIGHT	1552.3	3570	0	5576000	0
2	PILOT		1540	-600	0	0
3	FWD LEFT PAX		1640	80	0	0
4	FWD CENTER PAX		1460	320	0	0
5	FWD RIGHT PAX		1560	720	0	0
6	AFT RIGHT OUTER PAX		2420	735	0	0
7	AFT RIGHT INNER PAX		2420	245	0	0
8	AFT LEFT INNER PAX		2420	-245	0	0
9	AFT LEFT OUTER PAX		2420	-735	0	0
10	LEFT BAGGAGE		3200	-600	0	0
11	RIGHT BAGGAGE		3200	600	0	0
12	REAR BAGGAGE		4800	0	0	0
13	ZERO FUEL WEIGHT	1552.3	3593.37757	0	5576000	0
14	FUEL		0	0	0	0
15	TAKE OFF WEIGHT	1552.3	3593.37757	0	5576000	0
16	TRIP FUEL		3475	0	0	0
17	LANDING WEIGHT	1552.3	3593.37757	0	5576000	0

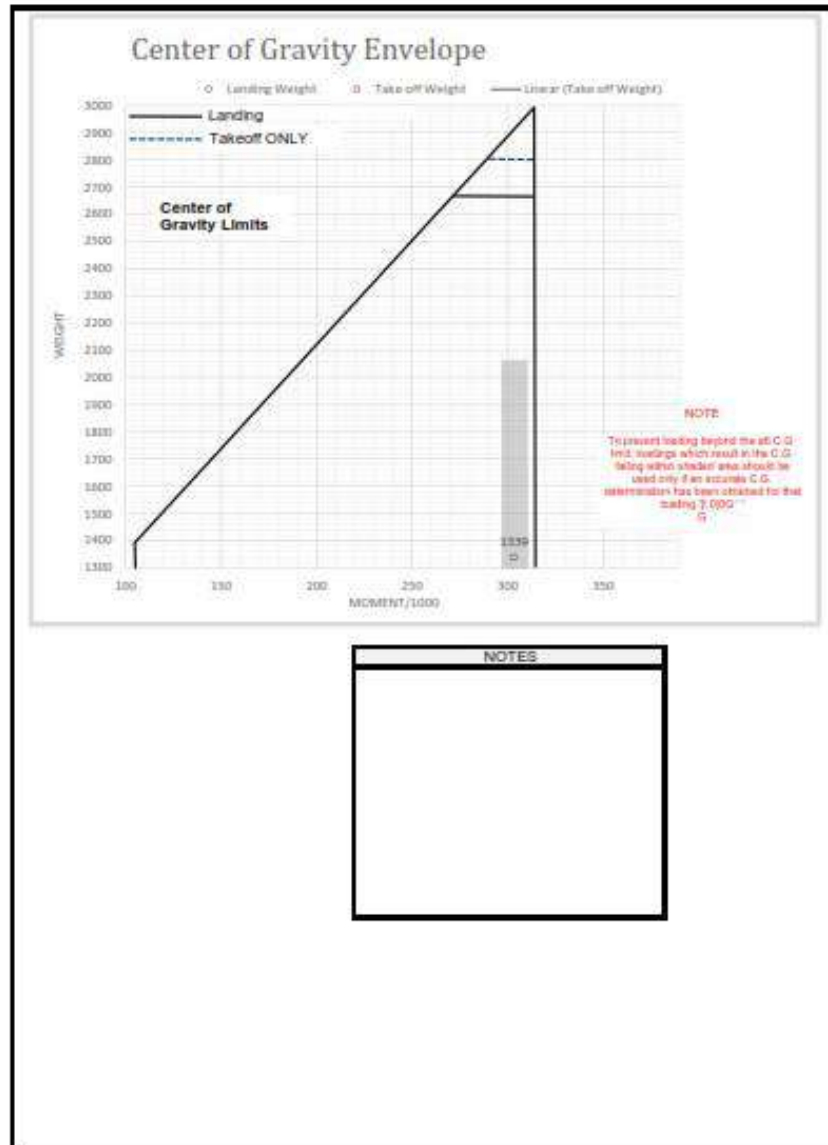
  

REMARK:	Prepared by:
	Captain:
	Capt.

### 21. LOAD SHEET PILATUS PC-6 PASSENGER

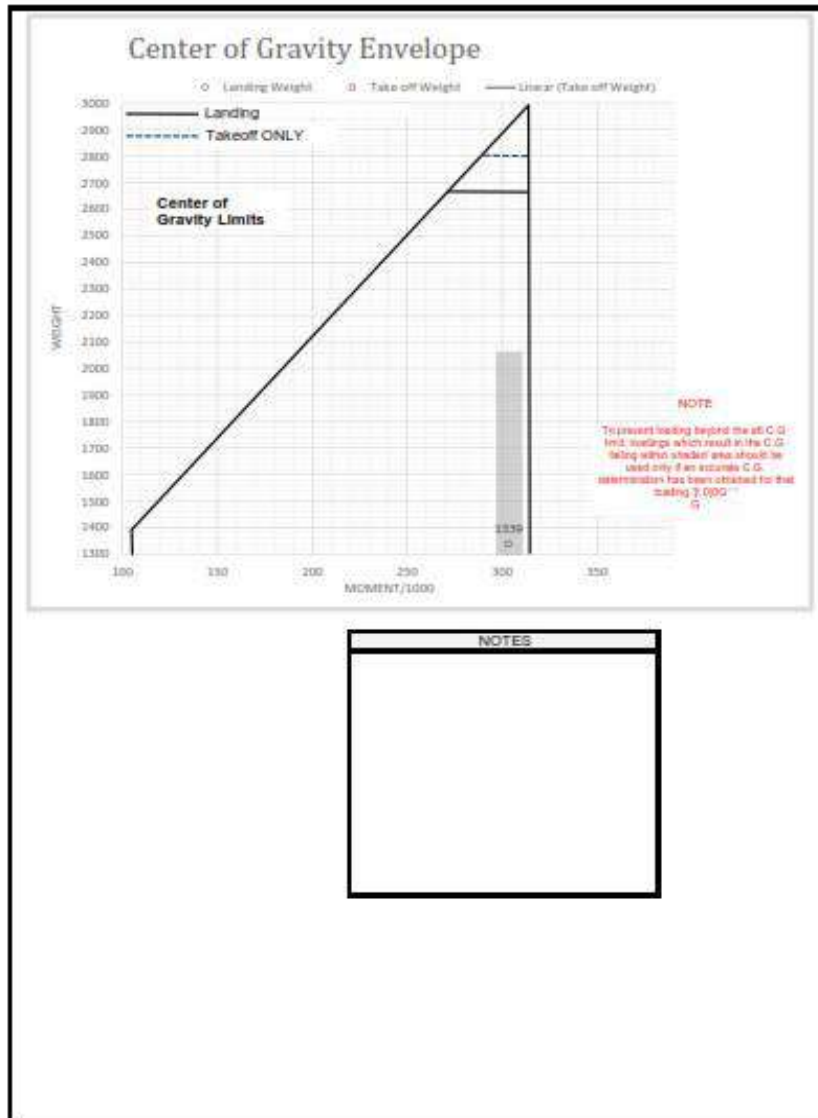
Weight & Balance Form PT. SMART CAKRAWALA AVIATION			
Aircraft Type / Serial No.:		PILATUS PC 6	
Registration Number:		PK- SNB	Configuration: PASSENGER
Date / Time:			Flight Number:
ADEP / ADES			FROM - TO:
<b>Instructions:</b> 1) Check the correct TAB for aircraft and configuration. (Passenger, Cargo or Aerial Survey) 2) Enter all passenger and load data into columns. <b>Note: Weight in Kg.</b> 3) Enter the amount of <b>Fuel in Kg</b> On Board in column below 4) Check load position on chart page 2 5) Enter the Fuel Use En-Route in column below 6) Check landing weight and moment 7) Check load position on chart page 2			
Pax and Cargo in Kilogram		Fuel On Board	Kg
Fuel in Kg		Fuel Use En-Route	Kg
Load Calculation		Weight	Arm
			Moment
Aircraft Empty Weight		1374,0	3,313
Fuel	170 USG 100% Full (515,5 Kg)		3,93
	125 USG 75% Full (386,9 Kg)		3,93
	05 USG 50% Full (259,2 Kg)		3,93
	42 USG 25% Full (129,6 Kg)		4,03
Pilots			3,10
			0,0
Passengers	Pax seat Station 2		3,60
	Pax seat Station 3		4,60
	Pax seat Station 4		5,30
			0,0
Cargo	Cargo Station 2		3,80
	Cargo Station 3		4,60
	Cargo Station 4		5,30
	Luggage after Station 4		5,60
			0,0
Ramp Weight		1374	4552
Fuel burn for taxi, startup		-35	-136
Takeoff Weight		1339	4415
Fuel Use Enroute		0	0
Landing Weight		1339	4415
Remaining Useful Load		1,321 KG	
<b>NOTE:</b> Ramp Weight 2810 Kg      Takeoff Weight 2800 Kg      Landing Weight 2660 Kg			
Prepared By: ..... Approved By: .....			





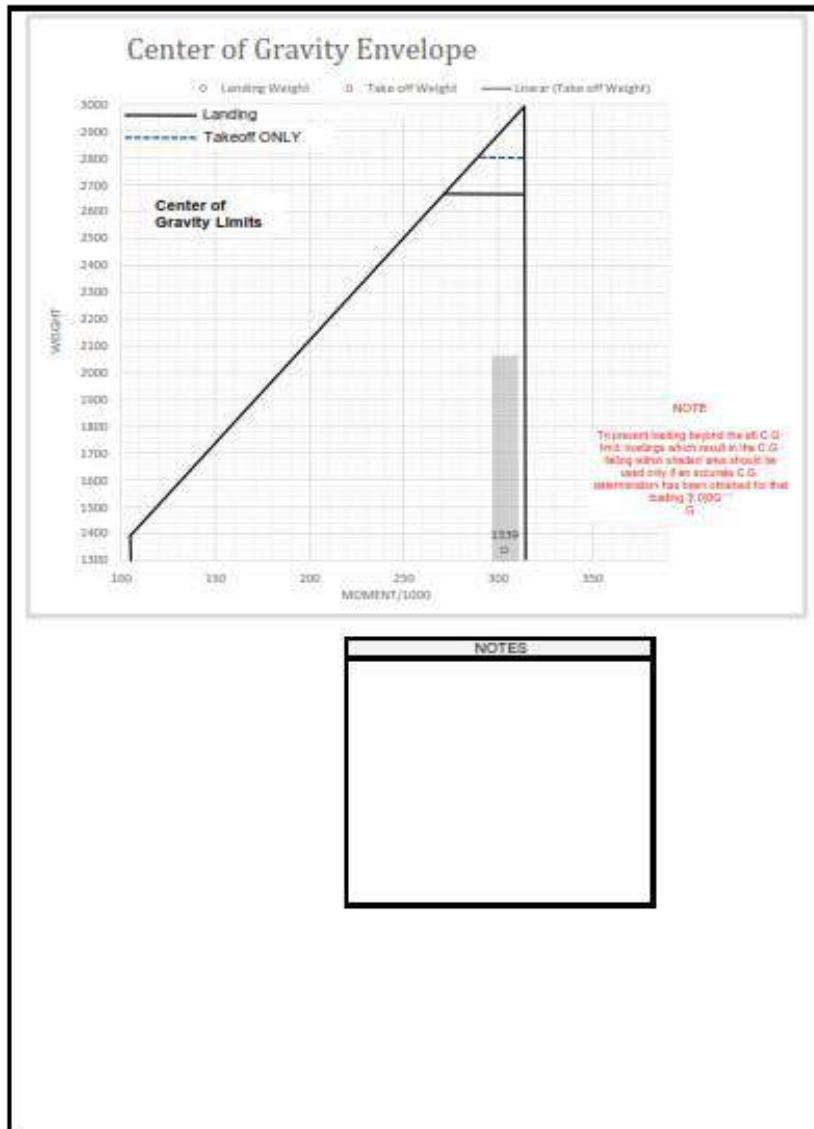
### 22. LOAD SHEET PILATUS PC-6 CARGO

Weight & Balance Form PT. SMART CAKRAWALA AVIATION																																																																											
Aircraft Type / Serial No.:		PILATUS PC 6																																																																									
Registration Number:		PK- SNB	Configuration																																																																								
Date / Time:			Flight Number																																																																								
ADEP / ADES			FROM - TO																																																																								
<b>Instructions:</b> 1) Check the correct TAB for aircraft and configuration. (Passenger, Cargo or Aerial Survey) 2) Enter all passenger and load data into columns. <u>Note: Weight in Kg.</u> 3) Enter the amount of <u>Fuel in Kg</u> On-Board in column below 4) Check load position on chart page 2 5) Enter the Fuel Use En-Route in column below 6) Check landing weight and moment 7) Check load position on chart page 2																																																																											
Pax and Cargo In Kilogram		Fuel On Board	Kg																																																																								
Fuel in Kg		Fuel Use En-Route	Kg																																																																								
<table border="1"> <thead> <tr> <th>Load Calculation</th> <th>Weight</th> <th>Arm</th> <th>Moment</th> </tr> </thead> <tbody> <tr> <td>Aircraft Empty Weight</td> <td>1374,0</td> <td>3,313</td> <td>4552,1</td> </tr> <tr> <td rowspan="4">Fuel</td> <td>170 USG 100% Full (516,5 Kg)</td> <td>3,93</td> <td>0,0</td> </tr> <tr> <td>126 USG 75% Full (386,9 Kg)</td> <td>3,93</td> <td>0,0</td> </tr> <tr> <td>65 USG 50% Full (259,2 Kg)</td> <td>3,93</td> <td>0,0</td> </tr> <tr> <td>42 USG 25% Full (129,6 Kg)</td> <td>4,03</td> <td>0,0</td> </tr> <tr> <td>Pilots</td> <td></td> <td>3,10</td> <td>0,0</td> </tr> <tr> <td rowspan="3">Passenger</td> <td>Pax seat Station 2</td> <td></td> <td>0,0</td> </tr> <tr> <td>Pax seat Station 3</td> <td></td> <td>0,0</td> </tr> <tr> <td>Pax seat Station 4</td> <td></td> <td>0,0</td> </tr> <tr> <td rowspan="4">Cargo</td> <td>Cargo Station 2</td> <td></td> <td>0,0</td> </tr> <tr> <td>Cargo Station 3</td> <td></td> <td>0,0</td> </tr> <tr> <td>Cargo Station 4</td> <td></td> <td>0,0</td> </tr> <tr> <td>Luggage after Station 4</td> <td></td> <td>0,0</td> </tr> <tr> <td>Ramp Weight</td> <td>1374</td> <td></td> <td>4552</td> </tr> <tr> <td>Fuel burn for taxi, startup</td> <td>-35</td> <td>3,93</td> <td>-136</td> </tr> <tr> <td>Takeoff Weight</td> <td>1339</td> <td>393</td> <td>4415</td> </tr> <tr> <td>Fuel Use Enroute</td> <td>0</td> <td>3,93</td> <td>0</td> </tr> <tr> <td>Landing Weight</td> <td>1339</td> <td>393</td> <td>4415</td> </tr> <tr> <td>Remaining Useful Load</td> <td>1329 KG</td> <td></td> <td></td> </tr> </tbody> </table>				Load Calculation	Weight	Arm	Moment	Aircraft Empty Weight	1374,0	3,313	4552,1	Fuel	170 USG 100% Full (516,5 Kg)	3,93	0,0	126 USG 75% Full (386,9 Kg)	3,93	0,0	65 USG 50% Full (259,2 Kg)	3,93	0,0	42 USG 25% Full (129,6 Kg)	4,03	0,0	Pilots		3,10	0,0	Passenger	Pax seat Station 2		0,0	Pax seat Station 3		0,0	Pax seat Station 4		0,0	Cargo	Cargo Station 2		0,0	Cargo Station 3		0,0	Cargo Station 4		0,0	Luggage after Station 4		0,0	Ramp Weight	1374		4552	Fuel burn for taxi, startup	-35	3,93	-136	Takeoff Weight	1339	393	4415	Fuel Use Enroute	0	3,93	0	Landing Weight	1339	393	4415	Remaining Useful Load	1329 KG		
Load Calculation	Weight	Arm	Moment																																																																								
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Remaining Useful Load	1329 KG																																																																										
<b>NOTE:</b> Ramp Weight 2810 Kg      Takeoff Weight 2800 Kg      Landing Weight 2650 Kg																																																																											
Prepared By: ..... Approved By: .....																																																																											



### 22. LOAD SHEET PILATUS PC-6 AERIAL SURVEY

Weight & Balance Form PT. SMART CAKRAWALA AVIATION			
Aircraft Type / Serial No.:		PILATUS PC 6	
Registration Number:		PK- SNB	Configuration: AERIAL SURVEY
Date / Time:			Flight Number
ADEP / ADES			FROM - TO
<b>Instructions:</b> 1) Check the correct TAB for aircraft and configuration. (Passenger, Cargo or Aerial Survey) 2) Enter all passenger and load data into columns. <u>Note: Weight in Kg</u> 3) Enter the amount of <u>Fuel On Board</u> in column below 4) Check load position on chart page 2 5) Enter the Fuel Use En-Route in column below 6) Check landing weight and moment 7) Check load position on chart page 2			
Pax and Cargo in Kilogram		Fuel On Board	Kg
Fuel In Kg		Fuel Use En-Route	Kg
Load Calculation		Weight	Moment
Aircraft Empty Weight		1374,0	4552,1
Fuel	170 USG 100% Full (515,5 Kg)		0,0
	120 USG 75% Full (386,9 Kg)		0,0
	05 USG 50% Full (259,2 Kg)		0,0
	42 USG 25% Full (129,6 Kg)		0,0
Pilots		3,10	0,0
Passenger	Pax seat Station 2	3,00	0,0
	Pax seat Station 3	4,00	0,0
	Pax seat Station 4	5,30	0,0
Cargo	Cargo Station 2	3,80	0,0
	Cargo Station 3	4,00	0,0
	Cargo Station 4	5,30	0,0
	Luggage after Station 4	5,00	0,0
Ramp Weight		1374	4552
Fuel burn for taxi, startup		-35	-136
Takeoff Weight		1339	4415
Fuel Use Enroute		0	0
Landing Weight		1339	4415
Remaining Useful Load		1,921 KG	
<b>NOTE:</b> Ramp Weight 2810 Kg      Takeoff Weight 2805 Kg      Landing Weight 2260 Kg			
Prepared By: ..... Approved By: .....			





### 23. PASSENGER SAEFTY BRIEFING EC 130 T2



**EC 130 T2  
PASSENGER  
SAFETY  
BRIEFING**



1. APPROACH AND LEAVE THE HELICOPTER IN THIS SECTION. THE PILOT CAN WATCH YOUR MOVEMENTS. DO NOT ENTER THE AREA CLOSE TO THE TAIL ROTOR.

**1**

Mendekati / Meninggalkan Helicopter harus berada di area aman di depan helicopter dan bisa terlihat dari cockpit / pilot.

Approaching / Leaving Helicopter must be in safe area in front of the helicopter and could be see from cockpit / pilot.



2. WHEN ENTER OR LEAVE THE AIRCRAFT BEND DOWN. BE AWARE OF : LOW ROTOR !

**2**

Mendekati / Meninggalkan Helicopter harus dalam posisi menunduk.

Approaching / Leaving the Helicopter must be in bending position.



3. APPROACH AND LEAVE THE AIRCRAFT AT THE LOWEST POINT OF THE TERRAINE.

**3**

Dilarang mengangkat barang bawaan melebihi tinggi kepala Anda.

Do not Raised your belongings above your head height.



4. WHEN LOAD OR UNLOAD THE AIRCRAFT, DO NOT THROW OBJECTS CLOSE TO THE AIRCRAFT. LONG OBJECTS AS SKI HAVE TO BE CARRIED HORIZONTALLY.

**4**

Atur barang bawaan anda ketika mendekati / meninggalkan helicopter untuk menghindari barang tercecer.

Organize your belongings when approaching / leaving the helicopter to avoid things scattered.



**5**

Pintu helicopter hanya boleh dibuka saat helicopter mendarat dengan sempurna

Doors maybe open only when helicopter is firmly on the ground.



**7**

Gunakan sabuk pengaman selama penerbangan.

Fasten seat belt during entire flight.



**10**

Dilarang menggunakan telepon seluler dan barang elektronik lainnya selama berada dalam helicopter (Penggunaan barang elektronik dapat mengganggu sistem navigasi Helicopter).

Do not operate cellular phone and other electronics devices in the helicopter (Utilizing these may interfere with helicopter navigation system).



**6**

Dilarang menahan fuel shut off valve dan rotor brake handle.

Do not hold the fuel shut off and the rotor brake handle.



**8**

Sabuk pengaman dapat dibuka setelah ada instruksi dari awak pesawat.

Unfasten your seat belt only when instructed by the helicopter crew.



**9**

Cara menggunakan pelampung

Life vest user guide.



**11**

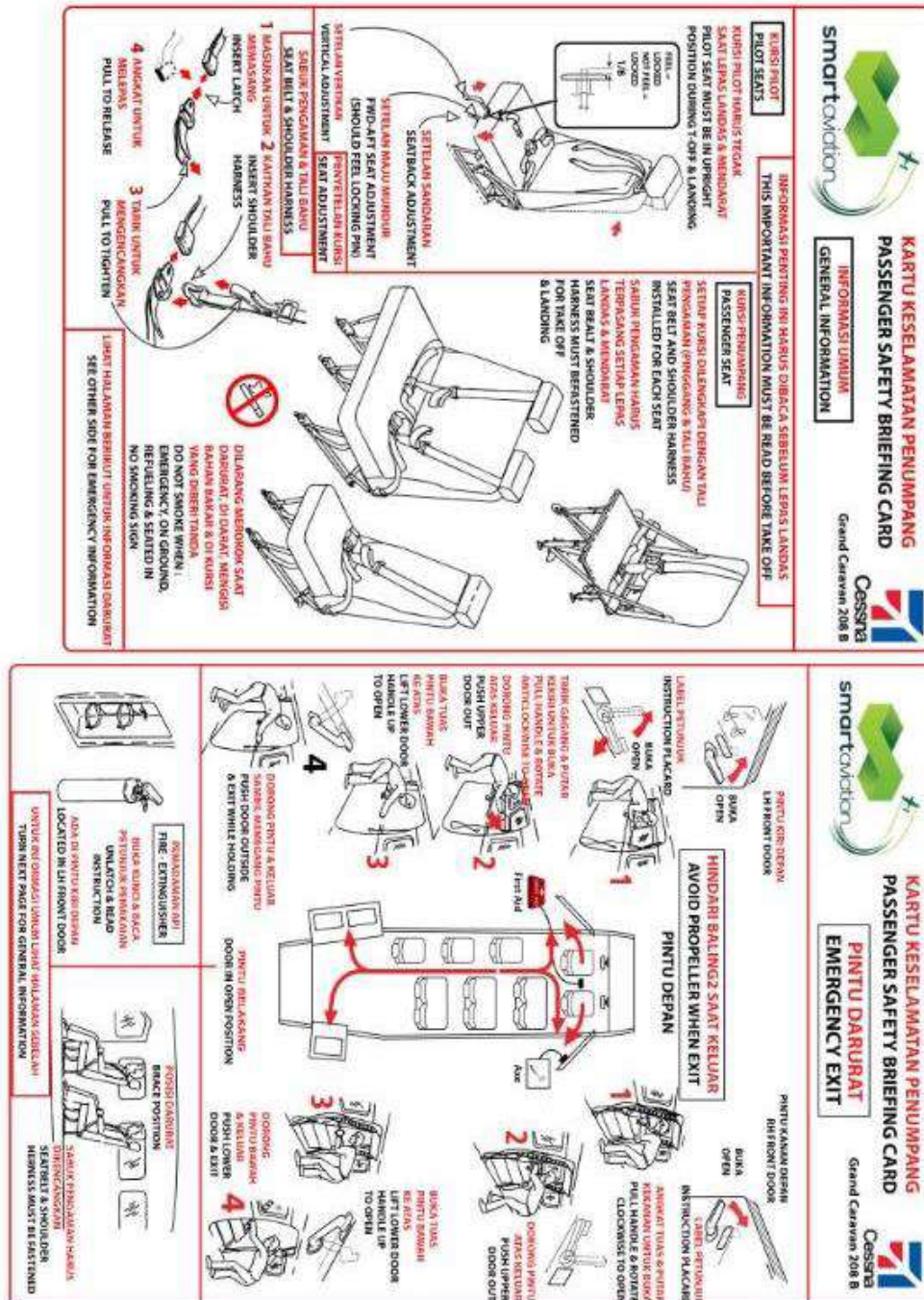
Dalam keadaan darurat, lepas penutup dan tarik tuas keatas (Instruksi dari Crew).

An emergency remove cover and pull the jettison ( Instruction by crew ).

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REV 00

## 24. PASSENGER SAFETY BRIEFING C208B



SCA-OPS-025

REV 00

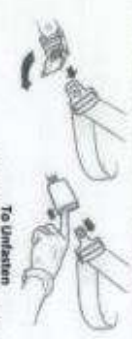


SCA-OPS-026


## Proper Use of Safety Belts and Doors

(Cara menggunakan sabuk keselamatan dan pintu dengan benar)

Ensure that safety belt is secure before takeoff  
(Pastikan sabuk keselamatan sudah terpasang sebelum lepas landas)



**Familiarize yourself with door operation upon entering aircraft**  
(Kenali cara pengunaan pintu ketika masuk ke pesawat)




**To Latch**  
(Untuk mengunci pintu)  
Pull door closed while sliding back and down  
(Turunkan pintu kemudian geser tuas ke belakang dan tekan kebawah)

**To Unlatch**  
(Untuk membuka pintu)  
Lift handle and slide forward  
(Angkat tuas dan geser ke depan)

**Do not lock doors during flight**  
(Jangan kunci pintu ketika terbang)

**Fire Extinguisher (Pemadam api)**



**No Smoking in or near helicopter**  
(Dilarang merokok di dalam atau dekat Helicopter)

**First Aid Kit (P3K - Pertolongan Pertama Kecelakaan)**

**If you have any questions, please ask pilot**  
(Jika ada pertanyaan, silahkan tanyakan ke pilot)

## Helicopter Safety Information

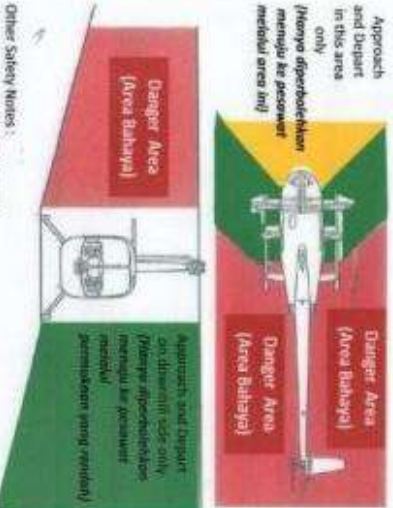
(Informasi Keselamatan Helikopter)

How to Approach and Depart Helicopter  
(Cara mengapproach dan Menunggu ke Helikopter)

Before approaching, make sure pilot sees you by establishing eye contact.  
(Sebelum mendekati ke pesawat, pastikan pilot melihat secara kontak mata dengan anda)

Approach and depart helicopter from forward area as shown.  
(Menunggu ke Helikopter dari arah depan)

Never approach or depart helicopter on unshaded side  
(Jangan mendatangi helikopter dari permukaan yang memantul)

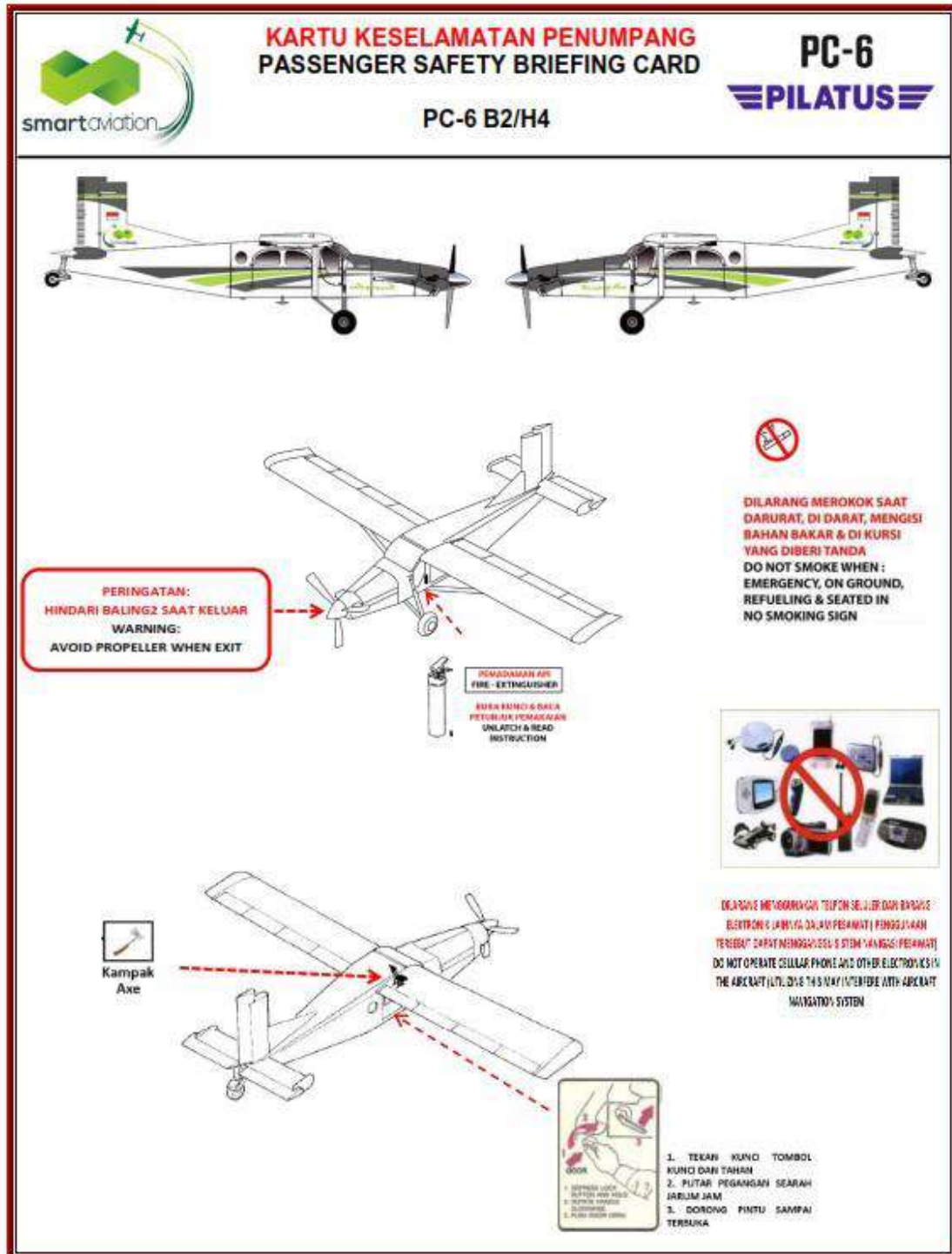



**Other Safety Notes:**  
(Catatan keselamatan lainnya):

- Stay low as you walk under main rotor blades.  
(Tetap merendah saat anda berjalan di bawah baling-baling - baling utama)
- To avoid tail rotor and engine exhaust, never duck under tailcone  
(Untuk menghindari baling-baling ekor dan asap mesin pesawat, jangan membungkuk di bawah ekor pesawat)
- Hold on firmly to rails and any loose articles  
(Peganglah dengan kuat rel dan barang-barang yang mudah lepas)
- Never reach up or chase after anything which has blown away.  
(Jangan mencoba atau mengejar balok atau barang yang terdampar oleh baling-baling)
- Never throw objects out of helicopter.  
(Jangan pernah melemparkan sesuatu keluar helikopter)

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**KARTU KESELAMATAN PENUMPANG**  
**PASSENGER SAFETY BRIEFING CARD**

**PC-6 B2/H4**



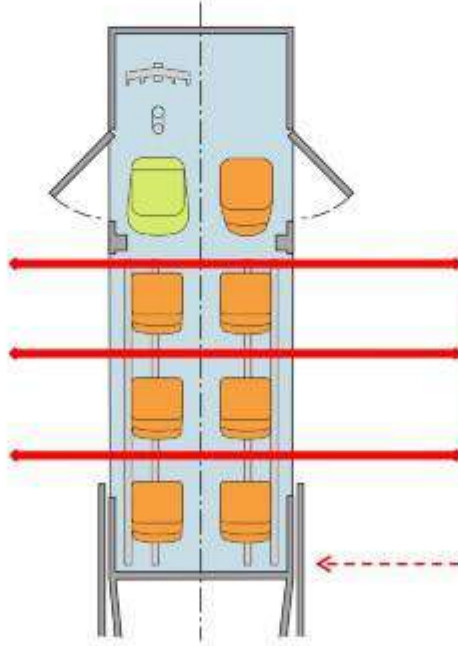



**CARA MENGGUNAKAN SABUK KESELAMATAN**  
**PASTIKAN SABUK KESELAMATAN SUDAH TERPASANG**  
**SEBELUM LEPAS LANDAS**  
**PROPER OF USE SAFETY BELTS**  
**ENSURE THE SAFETY BELT IS SECURE BEFORE TAKE OFF**




To Unfasten  
(Untuk melepaskan sabuk)

**PINTU KELUAR**  
**PENUMPANG**  
**EXIT PASSENGER**  
**DOOR**



**PINTU KELUAR**  
**PENUMPANG**  
**EXIT PASSENGER**  
**DOOR**


  
**P3K**  
 First Aid

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**KARTU KESELAMATAN PENUMPANG**  
**PASSENGER SAFETY BRIEFING CARD**  
**GENERAL INFORMATION**



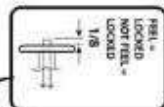
**INFORMASI UMUM**

INFORMASI PENTING INI HARUS DIBACA SEBELUM LEPAS LANDAS. THIS IMPORTANT INFORMATION MUST BE READ BEFORE TAKE OFF.

**KURSI PILOT**

PILOT SEAT

KURSI PILOT HARUS TEGAK. SAAT LEPAS LANDAS & MENDEKAT PILOT SEAT MUST BE IN UPRIGHT POSITION DURING T-OFF & LANDING.




PEEL - LOCKED NOT FEEL - LOCATED 1/8

**KURSI PENUMPANG**

PASSENGER SEAT

SETIAP KURSI DILINGKAPI DENGAN TALI PENGAMAN (PINGGANG & TALU BAHU). SEAT BELT AND SHOULDER HARNESS INSTALLED FOR EACH SEAT.

SABUK PENGAMAN HARUS TERPASANG SETIAP LEPAS LANDAS & MENDEKAT. SEAT BEALT & SHOULDER HARNESS MUST BEFASTENED FOR TAKE OFF & LANDING.



**SETIAP SANDARAN SEATBACK ADJUSTMENT**

**SETIAP MAJU MINJOUR FWD-AFT SEAT ADJUSTMENT (SHOULD FEEL LOCKING PIN)**

**SETIAP VERTIKAL VERTICAL ADJUSTMENT**

**PERVERTETELAN KURSI SEAT ADJUSTMENT**

**SABUK PENGAMAN & TALU BAHU SEAT BELT & SHOULDER HARNESS**


**1 MASUKAN UNTUK 2 KAITKAN TALU BAHU**

**MERTASANG INSERT LATCH**

**2 KAITKAN TALU BAHU INSERT SHOULDER HARNESS**


**3 TARIK UNTUK MENEGANGKAN PULL TO TIGHTEN**


**4 ANGGAT UNTUK MELEPAS PULL TO RELEASE**




**LIHAT HALAMAN BERIKUT UNTUK INFORMASI DARIKAT SEE OTHER SIDE FOR EMERGENCY INFORMATION**

**DILARANG MEROKOK SAAT DARIKAT, DI DAKAT, MENGIKSI BAHAN BAKAR & DI KURSI YANG DIBERI TANDA DO NOT SMOKE WHEN: EMERGENCY, ON GROUND, REFUELING & SEATED IN NO SMOKING SIGN**





**KARTU KESELAMATAN PENUMPANG**  
**PASSENGER SAFETY BRIEFING CARD**  
**PINTU DARURAT**  
**EMERGENCY EXIT**



**INFORMASI UMUM**

INFORMASI PENTING INI HARUS DIBACA SEBELUM LEPAS LANDAS. THIS IMPORTANT INFORMATION MUST BE READ BEFORE TAKE OFF.

**PINTU KIRI DEPAN LH FRONT DOOR**

**BUKA OPEN**

**1. TARIK GAGANG & PUTAR**

**2. PULL HANDLE & ROTATE**

**3. DOORING PINTU ATAS KETUKAR**


**4. PUSH UPPER DOOR OUT**

**5. BUKA TALI**

**6. PINTU BUKA**

**7. WE ASKS**

**8. LIFT LOWER DOOR HANDLE UP TO OPEN**



**PINTU KANAN DEPAN RH FRONT DOOR**

**BUKA OPEN**

**1. ANGGAT TALI & PUTAR**

**2. PULL HANDLE & ROTATE**

**3. DOORING PINTU ATAS KETUKAR**


**4. PUSH UPPER DOOR OUT**

**5. BUKA TALI**

**6. PINTU BUKA**

**7. WE ASKS**

**8. LIFT LOWER DOOR HANDLE UP TO OPEN**



**PINTU BELAKANG DOOR IN OPEN POSITION**

**1. TARIK GAGANG & PUTAR**

**2. PULL HANDLE & ROTATE**

**3. DOORING PINTU ATAS KETUKAR**


**4. PUSH UPPER DOOR OUT**

**5. BUKA TALI**

**6. PINTU BUKA**

**7. WE ASKS**

**8. LIFT LOWER DOOR HANDLE UP TO OPEN**



**PINTU BELAKANG DOOR IN OPEN POSITION**

**1. TARIK GAGANG & PUTAR**

**2. PULL HANDLE & ROTATE**

**3. DOORING PINTU ATAS KETUKAR**

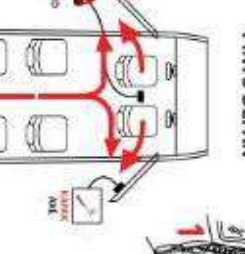
**4. PUSH UPPER DOOR OUT**

**5. BUKA TALI**

**6. PINTU BUKA**

**7. WE ASKS**

**8. LIFT LOWER DOOR HANDLE UP TO OPEN**



**PINTU BELAKANG DOOR IN OPEN POSITION**

**1. TARIK GAGANG & PUTAR**

**2. PULL HANDLE & ROTATE**

**3. DOORING PINTU ATAS KETUKAR**


**4. PUSH UPPER DOOR OUT**

**5. BUKA TALI**

**6. PINTU BUKA**

**7. WE ASKS**

**8. LIFT LOWER DOOR HANDLE UP TO OPEN**



**PINTU BELAKANG DOOR IN OPEN POSITION**

**1. TARIK GAGANG & PUTAR**

**2. PULL HANDLE & ROTATE**

**3. DOORING PINTU ATAS KETUKAR**


**4. PUSH UPPER DOOR OUT**

**5. BUKA TALI**

**6. PINTU BUKA**

**7. WE ASKS**

**8. LIFT LOWER DOOR HANDLE UP TO OPEN**





OPERATIONAL FLIGHT PLAN		Use only 1 (one) Operational Flight Plan form between each									
		FUEL REQUIREMENTS		TIME				ETD		4:35	
Date		TAXI	5								
PIC		TRIP	40	00:20					ETA		4:55
SIC		ALTERNATE	36	00:18							
Flight #	FERRY FLIGHT	HOLDING	90	00:45					DEPARTURE		WAOO
PK -	SNC	CONTINGENCY	10	00:05							
Type	Pilatus PC-6	MIN DISPATCH FUEL >>	181	01:28					DESTINATION		WALL
Rules	VFR	FUEL ON BOARD >>									
PAX :		Kg		DOW :		1483					
BGE :		50	Kg	ETOW :		2064					
CGO :		350	Kg	MTOW :		2800					
FLIGHT 1		WIND DIR & SPD >>		190	5						
WAYPOINTS FROM	ALT	DIST	TAS	GB	ETE	ETA	ATA	LEG FUEL	FUEL ACC	ALT FUEL	
WAYPOINTS TO	TRK	ACC			ACC				FUEL REM	REM	
TARAKAN	EXT	5	90	95	0:03	4:38		6	11		
TOC	020	5			0:03				170		
TOC	2000	27	120	115	0:14	4:52		28	39		
TOD	202	32			0:17				142		
TOD	ENT	5	120	115	0:03	4:55		6	45		
TANJUNG SELOR	202	37			0:20				136		
ALTERNATE											
TANJUNG SELOR	EXT	5	90	95	0:03	4:58		6	51		
TOC	022	5			0:03				130		
TOC	3000	27	120	125	0:13	5:11		26	77		
TOD	022	32			0:16				104		
TOD	ENT	5	120	125	0:02	5:13		4	81		
TARAKAN	022	37			0:18				100		
PREPARED BY		I HEREBY CONFIRM THAT I HAVE PERFORMED A THOROUGH SELF BRIEFING ABOUT THE DESTINATION AND ALTERNATE AIRPORTS OF THESE FLIGHTS INCLUDING THE APPLICABLE INSTRUMENT APPROACH PROCEDURES, AIRPORT FACILITIES, NOTAMS AND ALL OTHER RELEVANT PARTICULAR INFORMATION.						ROBERT PILOT IN COMMAND			
NOTE : ALL WEIGHT IN KG											

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### NORMAL PROCEDURE CHECKLIST PILATUS PC-6/B2-H4

#### BEFORE ENGINE START

1. Outside checks.....COMPLETED
2. Documents.....ON BOARD
3. PAX.....BRIEFED
4. Doors.....CLOSED
5. Seats/Rudder Pedals.....ADJUSTED
6. Seat Belts.....FASTENED
7. Parking Brake.....SET
8. Flight Controls.....UNLOCKED/CHECKED
9. L/H CB Panel.....CHECKED
10. Fuel.....OPEN/GATED
11. All light switches.....OFF
12. Landing Lights.....OFF/UP
13. Beacon .....OFF
14. Nav/Strobe.....OFF
15. BATTERY Switch .....OFF
16. GEN switch.....OFF
17. Aux Fuel Pump.....OFF
18. Ignition switch.....OFF
19. Starter switch.....OFF
20. Prop Control LVR.....FEATHER
21. PCL.....IDLE/DETENT
22. Stab Trim Inter Switch.....OFF/GUARDED
23. Emerg. Fuel Control .....OFF/GUARDED
24. Bat/Gen/Radio.....OFF
25. Cockpit/Cabin Fan .....OFF
26. Anti Ice/Prop De-Ice.....OFF
27. External Fuel Cont. ....OFF
28. External Fuel Emerg. Switch....OFF/GUARDED
29. R/H CB Panel.....CHECKED
30. Battery switch.....ON – check voltage
31. Battery switch.....OFF with GPU START
32. Stall Warning.....TEST
33. G1000 Database.....CHECK
34. COM/NAV.....SET

#### ENGINE START

1. Oil Temp.....CHECK ABV -40°C
2. Nav/Beacon Lts.....ON
3. AuxFuel Pump.....ON
4. Prop Area.....CLEAR
5. Start Switch.....ON
6. Oil Pressure.....CHECK RISING
7. Ignition Switch.....ON
8. NG Stable 12% Min.....LOW IDLE

9. ITT.....Monitor/1090 MAX 2 SECs
10. NG.....Stable 46%-51%
11. Starter/Ignition switches.....OFF
12. ITT.....STABLE BELOW 660°C

#### AFTER ENGINE START

1. If start with GPU.....BAT ON
2. GPU. ....DISCONNECT
3. Propeller LVR.....FWD
4. 1st flight of the day. ....Prop Cycle x2
5. GEN switch.....ON/28V/AMPS Pos.
6. NG.....ABV 51%
7. Radio Master BAT & GEN.....ON
8. COM/NAV/GPS.....CHECKED/SET

#### TAXIING

1. PAX.....SECURED
2. LDG/NAV Lts.....AS REQUIRED
3. Tailwheel.....FREE/STEER
4. Park Brake.....RELEASED
5. Instruments.....CHECKED

#### BEFORE DEPARTURE

1. Trims.....SET GREEN RANGE
2. Flaps.....SET TAKE OFF
3. Flight Controls .....FULL & FREE
4. Altimeter.....SET
5. Fuel Qty.....CHECKED
6. Aux Fuel Pump.....ON
7. Anti Ice/Prop De-Ice.....AS REQUIRED
8. Strobe Lt.....ON
9. Oil Temp.....GREEN RANGE
10. Instruments/COM/NAV/GPS/XPDR...CHECKED/SET
11. Heating Control .....OFF
12. Doors/Windows.....CLOSED
13. Departure briefing.....COMPLETED

#### LINE UP

1. Approach and RWY.....CLEAR
2. XPDR.....SET



### NORMAL PROCEDURE CHECKLIST PILATUS PC-6/B2-H4

3. Tailwheel.....LOCKED/RUDDER FREE
4. Time.....NOTED
5. Propeller LVR.....FULL FWD
6. Idle Cont. LVR.....FULL FWD

4. Flaps.....AS REQUIRED
5. Cabin Heat .....OFF
6. Landing Lights.....AS REQUIRED
7. Tailwheel .....LOCKED

#### TAKE OFF

1. Cautions/Warnings.....CHECKED
2. PWR/Torque.....SET
3. ITT.....725°C MAX
4. NG.....101.5% MAX
5. NP.....HIGH RPM

- #### FINALS
1. Flaps.....SET FOR LANDING
  2. Power.....AS REQUIRED
  3. Autopilot.....OFF

#### CLIMB

1. Flaps.....UP
2. Power.....AS REQUIRED
3. Speed.....70-90KIAS
4. Aux Fuel Pump.....OFF/CHECK Press
5. Oil Cooler.....GREEN 74-80°C
6. Lights.....AS REQUIRED
7. Heating.....AS REQUIRED
8. ITT.....695°C MAX

- #### AFTER LANDING
1. Trims.....GREEN RANGE
  2. Idle cont. Lvr .....Low Idle
  3. Tail wheel.....STEER
  4. Flaps.....UP
  5. Anti Ice/Prop De-ice.....OFF
  6. XPDR.....SBY
  7. Landing Lights .....OFF
  8. Strobe.....OFF
  9. Time.....Noted

#### CRUISE

1. Altimeter.....SET
2. G1000.....SET
3. Power.....SET
4. Engine parameters.....MONITOR

- #### ENGINE SHUTDOWN & PARKING
1. Parking brake.....SET
  2. PCL.....Idle 1 min
  3. Electr, Cons & radios .....OFF
  4. GEN.....OFF
  5. Idle cont. LVR.....OFF
  6. Propeller.....Feather
  7. Aux Fuel Pump.....OFF when  
Below 5%
  8. All lights .....OFF
  9. Battery.....OFF
  10. Flight Data/Documents.....Completed

#### DESCENT

1. ATIS.....RECEIVED
2. Approach Briefing.....COMPLETED
3. COM/NAV/GPS.....CHECKED/SET
4. Cabin/Pax.....SECURED
5. Fuel Qty.....CHECKED

#### APPROACH

1. Altimeter.....SET
2. Aux fuel Pump.....On
3. Prop and NG Control .....AS REQUIRED





### ABNORMAL/EMERGENCY PROCEDURE CHECKLIST PILATUS PC-6/B2-H4

#### ENGINE FAILURE IN FLIGHT

1. Idle Control Lever..... CUT-OFF
2. Propeller .....FEATHER
3. Power Lever.....Retard to detent
4. Aux Fuel Pump ... ..OFF
5. Fuel Syst. Valve.....Closed
6. Generator.....OFF
7. Electrical Power.....Reduce  
*Best Glide Speed.....75 KIAS*

#### AIR START

##### Immediate Relight

1. Power Lever ..... Retard to detent
2. Starter switch ..... ON
3. Ignition Switch .....ON
4. Idle Control Lever .....Low Idle
5. Engine Instruments ..... Monitor
6. Oil Pressure ..... Min 40 PSI

##### When engine stable in low idle:

7. Starter switch .....OFF
8. Ignition..... OFF
9. Idle Control lever ..... High Idle
10. Power lever ..... As required

#### NORMAL RELIGHT

1. Propeller ..... Forward
2. Power lever ..... Retard
3. Idle control ..... Cut off
4. BAT/Gen/Radio Bus ..... OFF
5. Fuel Syst. Valve ..... Open
6. Generator..... OFF
7. Aux fuel Pump ..... ON
8. Starter switch ..... ON
9. Ignition ..... ON
10. Oil Press ..... Check rising

##### NG above 12%:

11. Idle Control Lever ..... Low idle
12. ITT..... Monitor

##### NG 52%:

11. Oil Pressure ..... Green
12. Starter Switch ..... OFF
13. Ignition switch..... OFF
14. Generator switch..... ON

15. Idle Control Lever .....High idle
16. Power lever ..... As required
17. Bat/Gen/Radio Bus ..... ON

#### GROUND ENGINE FIRE (INSIDE ENGINE COMPARTMENT)

1. Idle Control Lever ..... Cut off
2. Fuel Syst Valve ..... Closed
3. Ignition Switch ..... OFF
4. Battery Switch ..... OFF
5. Generator .....OFF
6. Aux fuel Pump .....OFF
7. Aircraft..... Evacuate
8. Fire ..... Extinguish
9. Ground crew ..... Alert

#### GROUND ENGINE FIRE (WITHIN THE ENGINE)

1. Idle Control Lever ..... Cut Off
2. Ignition switch..... OFF
3. Generator switch ..... OFF
4. Aux Fuel Pump..... ON
5. Starter switch..... ON  
*Should the fire persist, as indicated by sustained high ITT, close fuel system valve and continue monitoring*
6. Starter switch..... Off
7. Aux fuel pump ..... Off
8. Battery switch ..... Off
9. Aircraft ..... Evacuate
10. Fire ..... Extinguish
11. Ground Crew..... Alert

#### IN FLIGHT ENGINE FIRE

1. Idle control lever ..... Cut off
2. Propeller ..... feather
3. Fuel Syst. Valve..... Close
4. Aux Fuel pump..... Off
5. Cabin air emerg. Shut off ..... Pull
6. Cabin heat control ..... Push
7. Power lever .....retard to detent
8. Electrical power..... reduce

#### CLEARING THE ENGINE

1. Idle control ..... cut off
2. Ignition switch ..... off
3. Generator switch..... off



### ABNORMAL/EMERGENCY PROCEDURE CHECKLIST PILATUS PC-6/B2-H4

4. Aux fuel pump ..... ON
5. Starter switch ..... On  
*Starter time limit: 30 seconds*
6. Starter switch ..... Off
7. Aux Fuel Pump ..... Off

#### FORCED LANDING

1. Prop control ..... feather
2. Fuel System valve ..... Close
3. Flaps ..... Take Off
4. Turn ..... to nearest airfield
5. Speed ..... 80 KIAS
6. Harness ..... Tight
7. Radio ..... Emergency Call
8. Flaps ..... Landing
9. Battery ..... OFF
10. Speed ..... 70 KIAS

#### PROP LOW PITCH

1. Power lever ..... Advance
2. Master Warning ..... Check

#### BAT BUS

1. Battery switch ..... Off
2. Volt/Amps ..... Monitor
3. Bus Tie CB ..... Pull

#### GEN BUS

1. Check warnings
2. Generator switch ..... On
3. Gen Reset ..... On the release
4. Volt/Ammeter ..... Check

#### If Gen/Bus still On

5. Bus Tie CB ..... Pull
6. Anti Ice ..... off
7. Lights ..... Off
8. Avionics ..... as required
9. Land as soon as practical

#### BAT HOT

1. Check warnings
2. Battery switch ..... Off
3. When Bat Hot Light goes out

4. Battery switch ..... On
5. Bat Hot caution ..... Monitor

#### GENERATOR

1. Warning ..... Checked
2. Generator switch ..... On
3. Generator reset switch ..... On then release
4. Volt/Ammeter ..... Check

#### If generator still Inoperative:

5. Generator Switch ..... Off

#### Shed load

6. Anti ice ..... off
7. Lights ..... off
8. Avionics ..... as required
9. Land as soon as practical

#### F FILTER

1. Warning ..... Check
2. Land as soon as practical

#### FUEL PRESS

1. Warning ..... Check
2. Aux Fuel Pump switch ..... On

#### CHIP

1. Power Lever ..... reduce power
2. Check warnings
3. Land as soon as practical

#### Trims do not operate

#### TRIM RUNAWAY

##### Horizontal Stabilizer trim

1. Trim Interrupt switch ..... UP
2. Stab trim CB ..... Pull
3. Trim Interrupt switch ..... Down  
*If trim does not move: indicates main system trim runaway*
4. Alternate Stab Trim UP/DN ..... Operate  
*If trim does move: indicates an alternate system trim runaway*





## ABNORMAL/EMERGENCY PROCEDURE CHECKLIST PILATUS PC-6/B2-H4

5. Trim Interrupt switch..... Up
6. Stab trim CB ..... Push
7. Main Trim switch ..... Press & Hold
8. Trim Interrupt switch ..... Down  
As soon as trim is in desired position
9. Trim Interrupt switch ..... Up
10. Land without further trim operation

### RUDDER TRIM

1. Trim interrupt switch ..... UP
2. Rudder trim CB ..... Pull
3. Trim Interrupt CB ..... Down

### Rudder trim is inoperative

#### Aileron trim

1. Trim Interrupt switch ..... UP
2. Aileron trim CB ..... Pull
3. Trim Interrupt CB..... Pull

### AILERON TRIM IS INOPERATIVE

#### Jammed trim actuators

1. Airspeed ..... Adjust
2. Land as soon as practical  
Jammed in the full nose up position:  
Do not use flaps for landing

#### Jammed in fully nose down position

1. Flaps set for T/O in cruise
2. Flaps set for LD for landing

### INADVERTENT SPIN

1. Reduce power
2. Flaps UP
3. Opposite rudder
4. Stick centered

